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City and County of San Francisco

Capital Plan Fiscal Years 2016-2025

Approved by
Mayor Edwin M. Lee
&
The Board of Supervisors
April 21, 2015

Copies of this document can be found at <http://onesanfrancisco.org> or through
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1 Planning Program



OFFICE OF THE CITY ADMINISTRATOR



Edwin M. Lee, Mayor
Naomi M. Kelly, City Administrator

March 3, 2015

The Honorable Edwin M. Lee, Mayor
City and County of San Francisco
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102

Honorable Members of the Board of Supervisors
City and County of San Francisco
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102

Re: Proposed City and County of San Francisco Capital Plan FY 2016 – FY 2025

Dear Mayor Lee and Members of the Board of Supervisors:

In compliance with the San Francisco Administrative Code Section 3.20, I am pleased to submit the Proposed City and County of San Francisco capital expenditure plan. As the guiding document for City infrastructure investments, this Capital Plan is an assessment of the City's capital needs, the investment required to meet those needs, and a detailed plan to finance them for the next ten years.

The Proposed FY 2016-FY 2025 Capital Plan marks the end of the first completed 10-year cycle since the original FY 2007-2016 Capital Plan was passed nine years ago. Since that time, San Francisco has seen historic levels of investment in its infrastructure that includes over \$10 billion in actual spending from a variety of difference sources and over \$2.8 billion in voter authorized General Obligation bonds.

Many of the projects funded by these measures such as new parks, libraries, buildings, streets, and bridges are easy to see and experience, while others such as seismic repairs, new water and sewer systems, cisterns, and reservoirs are less visible but just as critical. These improvements not only touch the daily lives of millions of residents and visitors but they also enable us to prepare for and better respond to future earthquakes and disasters. The investments have also created thousands of jobs for San Francisco residents that helped to pull us out of the recession early and are supporting the current economic boom.

This Proposed Plan continues the City's commitment by recommending \$32 billion to address critical seismic repairs and long-standing problems over the next ten years. It includes retrofitting and modernizing the transportation network and key public safety facilities like fire and police stations, as well as hospitals and related public health buildings. It also supports investments to address population and job growth over the next decade.

Even with high level of investment, the Proposed Plan defers \$3.6 billion in identified needs and does not fully fund annual state of good repair needs until 2025. With this additional work in mind, we look forward to working with the Mayor and Board to develop solutions and take advantage of current economic conditions to achieve or exceed the recommendations of this Plan. This would carry-on the efforts of the original capital plan to ensure San Francisco's infrastructure remains strong and vibrant into the future.

Additional copies of the Proposed Plan, a project appendix, and related materials can be found at onesanfrancisco.org.

Sincerely,

Naomi M. Kelly
City Administrator

San Francisco's Ten-Year Capital Plan Governance Structure

In August 2005, concerns from city leaders, citizens, Mayor Newsom and the Board of Supervisors culminated in Administrative Code Sections 3.20 and 3.21 requiring the City to annually develop and adopt a ten-year constrained capital expenditure plan for city-owned facilities and infrastructure. The code ensures the Plan's relevance by requiring that all capital expenditures be reviewed in light of the adopted capital expenditure plan.

The Capital Planning Committee (CPC) approves the Capital Plan and makes recommendations to the Board of Supervisors on all of the City's capital expenditures. It consists of the City Administrator as chair, the President of the Board of Supervisors, the Mayor's Finance Director, the Controller, the City Planning Director, the Public Works Director, the Airport Director, the Municipal Transportation Agency Executive Director, the Public Utilities Commission General Manager, the Recreation and Parks Department General Manager, and the Port of San Francisco Executive Director. The mission of the Capital Planning Committee is to review the proposed capital expenditure plan and to monitor the City's ongoing compliance with the final adopted capital plan.

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Introduction

The Fiscal Year (FY) 2016-2025 City and County of San Francisco Capital Plan (the Plan) is the City's commitment to building a stronger, more vibrant future for residents, workers, and visitors of San Francisco. Updated every other year, the Capital Plan is a fiscally constrained 10-year expenditure plan that lays out infrastructure investments over the next decade.

This Capital Plan marks the end of the first completed 10-year cycle. The original Capital Plan covered FY 2007-2016 and this Plan begins where the original left off and continues through FY 2025. Key goals for this Plan include: increasing resiliency including new guidelines to address sea level rise and a plan to relocate all city functions from the Hall of Justice by 2023; planning for growth in the rapidly changing eastern portion and waterfront areas of the City; continuing to make critical improvements to the water and sewer systems, transportation network, and airport; and investing in state-of-good repairs improvements to facilities and streets through the General Fund pay-as-you-go program.



New Glen Canyon Playground

Capital Accomplishments

San Francisco is riding a historic wave of infrastructure investments. Since 2008, voters have approved seven General Obligation (G.O.) bonds totaling \$2.8 billion. G.O. bond proceeds supported by more than 2/3rds of San Francisco voters have funded improvements to the City's hospitals, fire and police stations, and facilities that will enable first responders to act quickly and efficiently in the event of an earthquake. They have also provided critical park, street, and transportation improvements that touch residents on a daily basis. See the table below for a list of recently passed measures. Prior to the Capital Plan's creation, the City had not successfully passed any G.O. bonds between 2001 and 2007.

Voter-approved G.O. Bonds since the Capital Plan's Creation

(Dollars in Millions)

	<i>Debt Issuance</i>	<i>Amount</i>
2008	Neighborhood Parks and Open Space	\$180
2008	Public Health Seismic Facilities (SFGH rebuild)	\$887
2010	Earthquake Safety & Emergency Response	\$412
2011	Road Resurfacing and Street Safety	\$248
2012	Neighborhood Parks and Open Space	\$195
2014	Earthquake Safety & Emergency Response	\$400
2014	Transportation	\$500
Voter-approved G.O. Bond Total		\$2,822

In addition to historic G.O. Bond investments, the Capital Plan has helped shepherd in a record level of capital funding through revenue bonds and other sources at the San Francisco Public Utilities Commission (SFPUC), San Francisco International Airport (SFO), the San Francisco Metropolitan Transportation Agency (SFMTA) and County Transportation Authority, and at key facilities such as the Veteran's War Memorial Building. The annual General Fund (GF) budget has also made significant contributions. In FY 2015, the Mayor and the Board of Supervisors adopted a \$114 million capital budget – the highest capital budget in recent history and several times larger than some of the budgets during the recent recession and prior to 2008.

Capital Plan Overview

The FY 2016-2025 Capital Plan generally retains most policies and practices set in prior year plans, including maintaining restrictions around issuing debt and fully funding certain capital programs such as the City's Americans with Disability Act (ADA) transition plans, facilities maintenance, and street resurfacing. The Plan also proposes a number of goals that continue key objectives from previous years, including funding renewals at record levels; relocating critical City services to seismically sound facilities; and continuing construction on hundreds of other public infrastructure projects and planning efforts to improve services.

Critical projects currently in planning or construction phases include, but are not limited to: improvements to the San Francisco General Hospital campus; the Veteran's War Memorial Building retrofit; the Water System and Sewer System Improvement Programs; the HOPESF housing projects; Pier 70; Seawall Lot 337 development projects; neighborhood park renovations; major transportation projects such as Muni Forward, Vision Zero Pedestrian Safety Program, the Van Ness and Geary Bus Rapid Transit (BRT) projects, the new air traffic control tower and other improvements at SFO, the Central Subway, Transbay Terminal, and Presidio Parkway (formerly Doyle Drive).

Capital Plan Funding Summary

This Plan recommends \$23 billion in direct City investments and \$9 billion in external agency investment, which together total \$32 billion in capital improvements citywide. These improvements represent a practical and fiscally constrained set of projects that address critical capital needs while creating an estimated 240,000 local jobs over the next decade (see Appendix B for job estimation methodology).



Ashbury Heights Tank

The Plan is a coordinated city-wide approach to long-term infrastructure planning, covering the City's General Fund Departments, as well as Enterprise Departments and External Agencies. Unlike Enterprise Departments and External Agencies, General Fund Departments primarily rely on the General Fund to support their infrastructure needs. The following tables provide an overview of the proposed Capital Plan program. The first table shows the breakdown of the Plan's proposed investments by service category and department type and the second table illustrates the proposed program in five year intervals across service category and department type.

Capital Plan Summary in Five-Year Intervals (Dollars in Millions)

By Service Category	FY16-20	FY21-25	Plan Total
Public Safety	1,135	475	1,610
Health and Human Services	749	1,020	1,768
Infrastructure & Streets	5,451	4,056	9,508
Recreation, Culture, and Education	283	372	655
Economic & Neighborhood Development	2,469	1,825	4,294
Transportation	8,302	5,560	13,862
General Government	46	170	216
Total	18,436	13,478	31,914
By Department Type	FY16-20	FY21-25	Plan Total
General Fund Departments	2,884	2,228	5,112
Enterprise Departments	11,274	6,998	18,271
City & County Subtotal	14,157	9,225	23,383
External Agencies	4,279	4,253	8,531
Total	18,436	13,478	31,914

The table to the right outlines the General Fund Department investments as well as projects deferred from the Plan due to funding limitations. Note this list is not exhaustive; the Emerging Needs section at the end of most chapters identifies projects that require additional analysis.

General Fund Department Program Summary

(Dollars in Millions)

<u>Renewal Investments</u>	<u>Funded</u>	<u>Deferred</u>
Today's Backlogs		
Facilities		396
Streets		695
Subtotal		1,091
Projected for Next Ten Years		
Facilities	595	254
Streets	874	
Other right-of-way assets	220	
Subtotal	1,689	254
Subtotal, Renewals	1,689	1,345
<u>Capital Enhancement Investments</u>	<u>Funded</u>	<u>Deferred</u>
Earthquake & Safety Improvements		
Animal Care and Control Facility Renovation & Seismic Retrofit	49	
Auxiliary Water Supply System Improvements	175	
DPH Administration Building Relocation	60	
HOJ Relocation Projects	620	
JUV Administrative Building Replacement	107	
Office of Chief Medical Examiner (OCME) Facility	65	
SFFD Ambulance Deployment Center Relocation	40	
SFFD Neighborhood Stations and Critical Facilities Improvements	210	
SFGH Bldg 5 Renovation & Seismic Retrofit Projects	190	10
SFPD Traffic Company & Forensic Services Facility	165	
Police Stations Seismic Improvements & Renewals	110	
SFGH Building 80/90 Renovation & Seismic Retrofit	141	
SFTD Training Facility Relocation and Expansion		131
Other Earthquake & Safety Improvements	25	2
Subtotal	1,956	144
Disability Access Improvements		
Facilities	18	
Sidewalk Improvements and Repair Program	85	
Curb Ramps (ADA Right-of-Way Transition Plan)	71	
Subtotal	175	
Parks, Open Space & Greening Improvements		
Parks Systemwide Modernization Program	300	
Subtotal	300	
Street Infrastructure Improvements		
Coordinated Safety Improvements		48
Streetscape Improvement Program		451
Bayview Transportation Improvements		52
Jefferson Street Streetscape Enhancement Project, Phase 2		21
Market Street Plaza Enhancements		122
Utility Undergrounding		1,287
Subtotal		1,982
Other Improvements		
Moscone Convention Center Expansion	482	
Wholesale Produce Market Expansion	69	
Public Works Operation Yard Modernization	100	
Southeast Health Center Expansion and Behavioral Health Integration Project	33	
Public Health Facilities Improvements	159	
Other Projects	150	51
Subtotal	992	51
Subtotal, Enhancements	3,423	2,177
PLAN TOTAL	5,112	3,522

General Fund Department – Pay-as-you-go Program

The Plan proposes to fund the majority of its pay-as-you-go or ongoing annual needs with General Fund dollars. These are typically smaller investments to maintain facilities and infrastructure

in a state of good repair, fund critical infrastructure needs, or support project development and planning. Within the Pay-as-you-go Program, Routine Maintenance, ADA Transition Plans for Facilities and Public Right-of-Way, Street Resurfacing, and a new category called Critical Enhancements are fully funded. The remaining funds are allocated to Facility Renewals and Streets and Right-of-Way Renewals based on their proportionate need. Another addition to the Plan is the decision to fund the Critical Project development through a revolving fund. These items are discussed in greater detail under the Pay-as-you-go Program highlights below.

Pay-as-you-go Program Funding Policies

Key Pay-as-you-go policies within this Plan include:

- Annually increasing the General Fund pay-as-you-go commitment by seven percent to address renewal needs;
- Fully funding the street resurfacing program at the level needed to achieve a “Good” Pavement Condition Index (PCI) of 70 by 2025;
- Reserve \$10 million of General Fund dollars annually to fund critical enhancement projects not covered through proposed bond programs.

Pay-as-you-go Program Highlights

The Plan proposes \$1.66 billion into the Pay-as-you-go Program over the next ten years. After inflation, this is a decrease over the FY 2014-2023 Capital Plan primarily due to reducing the growth of the annual commitment from 10 percent to seven percent from FY 2017 to FY 2025. In previous versions, this commitment was escalated by 10 percent annually from the amount established in the original FY 2007-2016 Plan. Setting a new baseline based on the commitment for the FY 2015 capital budget and assuming seven percent annual escalation going forward sets a more realistic General Fund commitment; especially in the final years of the Plan, which under the old methodology would have more than doubled. However, growing the Pay-as-you-Go program at seven percent means the budget will be unable to cover annual renewal needs until 2025.

Another change in the Pay-as-you-go Program is the creation of a revolving Capital Planning Fund for critical project development or pre-bond planning outside the regular General Fund budget. Historically, the General Fund supported pre-bond critical project development on the condition that once bonds were issued, the General Fund would be reimbursed.

This Plan assumes that bond reimbursements will now flow into the Capital Planning Fund and be used for future project development and pre-bond planning.

The Plan also recommends annually reserving \$10 million from the Pay-as-you-go Program to fund critical enhancement projects not covered by proposed bond programs. This is a new policy which was created in an effort to better reflect actual decisions made during the budget process. The Plan assumes that enhancement funds will be allocated to specific projects through the City’s annual capital budget prioritization process. Potential projects that could be funded with these funds include unanticipated emergency improvements and projects that address growth or other capital needs but are not good candidates for debt financing due to their size and timing.

Lastly, the Pay-as-you-go Program continues the City’s commitment

See the Streets and Right-of-Way chapter under Infrastructure and Streets section for additional information on efforts to meet the PCI target of 70 in 2025

More than \$10 million of the annual pay-as-you-go has been spent on enhancement projects such as Telegraph Hill depicted below. This has made it difficult to fund on-going renewals.



Telegraph Hill rockslide repairs

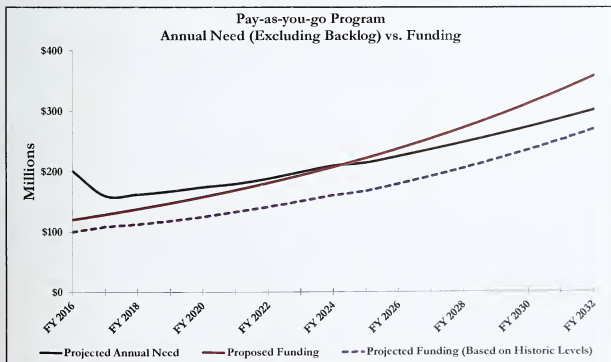
to safe and accessible facilities and paths of travel for individuals with disabilities. Streets and right-of-way Americans with Disability Act (ADA) investments outside street repaving and streetscape improvement projects total \$112 million over the next ten years. ADA Facility investments represent projects related to the City's ADA Facility Transition Plan. The majority of remaining ADA Transition Plan facility projects are completed within the first three years of the Plan. As a result, the need for ADA facility improvements significantly declines in the remaining seven years. Like the Public ROW investments, the ADA Facilities represent a small fraction of the accessibility improvements the Plan funds. Nearly all projects- from restroom renovations to the construction of new facilities and assets - include accessibility upgrades.

The table below provides a summary of proposed funding for the Pay-as-you-go Program.

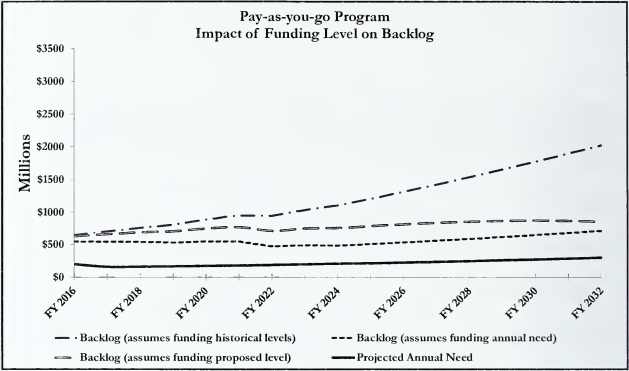
General Fund Pay-as-you-go Program Funding (Dollars in Millions)			
	FY16-20	FY21-25	Plan Total
Routine Maintenance	72	92	164
ADA: Facilities	13	5	18
ADA: Public Right-of-Way	52	59	111
Street Resurfacing	270	365	635
Enhancements	50	50	100
ROW Infrastructure Renewal	42	73	115
Facility Renewal	191	328	519
Total Projected Funding	690	972	1,663

Under current Plan assumptions, the City will begin to fully address its annual needs starting in FY 2025; however reaching this level of funding is dependent on the City meeting the Plan's funding recommendations during the annual budget process. If the annual budget falls short of the Plan's recommendations for facility renewals, the Pay-as-you-go Program needs will not be met within the Plan's timeframe.

The following graph compares the annual Pay-as-you-go Program need, excluding current backlog, with the Plan's proposed funding and the projected funding if future annual budgets are similar to historic levels.



Even if the City meets the Plan’s funding recommendations, the existing backlog is still projected to increase by 44 percent to approximately \$800 million by the end of the Plan. This increase is the result of the combination of backlog accumulated within the first six years of the Plan and cost escalation of today’s existing backlog. However, if the City were to continue on the current Plan’s funding trajectory, it would start seeing a reduction in its backlog starting in 2031. The graph below shows the relationship between proposed funding levels and backlog growth.



Critical Project Development continues the City’s commitment to funding pre-development planning so that project costs and impacts are clearly understood before a decision is made to either fund or place a project before voters.

As mentioned earlier, this Plan calls for critical project development to be funded through the use of a revolving fund called the Capital Planning Fund to support pre-bond project planning. This Plan proposes reimbursements from the 2014 Earthquake Safety & Emergency Response Bond and the 2016 Public Health Bond to provide the initial seed money for the Capital Planning Fund. The following table summarizes the anticipated fund balance over the first and second five years of the Plan.

Capital Planning Fund in Five-Year Intervals (Dollars in Millions)		
	FY16-20	FY21-25
Project Development Need	19.1	17.8
Projected Sources*	29.7	19.6
Cumulative Balance in Fund	10.6	1.9

** Projections based on current debt programming; subject to change as program details are further refined*

Projects expected to receive Capital Planning Funds include: (1) the relocation of key services out of the seismically vulnerable Hall of Justice including the Rehabilitation and Detention Center to replace County Jails #3 and #4 and other court-related functions; (2) the seismic retrofit or upgrades of critical public health buildings including Building 5 at the San Francisco General Hospital and the South East Health Center; (3) the seismic upgrade and renovation of the City’s Animal Shelter; (4) the Department of Public Health Administrative Building relocation; (5) the Juvenile Probation Department Administrative Building replacement; and (6) the Public Works Yard modernization effort.

General Fund Department - Debt Program

Most of the capital investments outlined in the General Fund Summary Table on page five are funded with voter-approved G.O. bonds or General Fund secured debt such as lease revenue bonds and certificates of participation (COPs). Debt financing is an appropriate revenue source for these types of capital enhancements given these projects involve assets with long useful lives and high upfront costs which the City would not be able to cover through its annual Pay-as-you-go Program. The use of debt also spreads the financial burden of paying for facilities between current residents and future generations who will also receive benefits from the project.

GF Department Debt Program Policies

The City maintains internal financial policies that limit the amount of debt that it can issue. These policies are stricter than those imposed by the City Charter and State and include the following:

- When issued, G.O. bonds proposed by this Plan will not increase voters' long-term property tax rates above FY 2006 levels. Therefore new G.O. bonds are typically used as existing approved and issued debt is retired and/or the property tax base grows.
- The City will maintain the percentage of the General Fund spent on debt service at or below 3.25 percent of discretionary revenues. As a result, the City's ability to issue secured debt is limited. Financing instruments will only be used when existing GF debt is retired and/or the City's General Fund grows.

G.O. Debt Program Highlights

Since the creation of the first Plan, the City has successfully gained voter approval for seven G.O. bonds that support a wide range of critical infrastructure improvements. Recently approved G.O. bond measures include the 2014 Earthquake Safety & Emergency Response Bond and the 2014 Transportation 2030 Bond. The next proposed bond is a Public Health Bond scheduled for the June 2016 ballot.

In general, the Plan structures the G.O. Bond schedule around the notion of rotating bond programs that target specific areas of capital need every six years or so - although factors such as the City's debt capacity, election schedules and capital needs also factored into timing recommendations. This approach was established in the original 2007 Capital Plan and has been maintained ever since.

Specific areas of capital need include Earthquake Safety, Parks & Open Space, and Public Health; however the Plan occasionally recommends bonds outside these categories, if there is a demonstrated capital need that the City would otherwise not be able to afford.

Planning for future bonds is funded through the Capital Plan's Pay-as-you-go Program within the Critical Project Development category. This investment in planning helps increase public confidence, and the likelihood that these projects will be delivered on time and on budget by improving cost estimation reliability and refining project delivery methods.

The following table shows the Capital Plan's proposed G.O. Bond Program for the next 10-years. All costs listed in future bond programs are estimates and may need to be adjusted in future plans to account for new federal and state laws, programmatic changes, site acquisition, alternate delivery methods, changing rates of construction cost escalation, and/or newly emerged City needs.

The proposal aligns with the Capital Plan's rotating bond approach, although the Plan also recommends a Transportation Bond in 2024. Addressing the City's transportation capital needs has been a high priority for the City and the Capital Plan in recent years. The Mayor's Transportation 2030 Taskforce Report identified \$10 billion in need and recommended the City consider using two G.O. Bonds to help bridge the funding gap. The last Capital Plan recommended a \$500 million Transportation Bond (approved by voters in November 2014) and this Plan continues this commitment by recommending a second Transportation Bond – which was also recommended in the Transportation 2030 Taskforce Report.

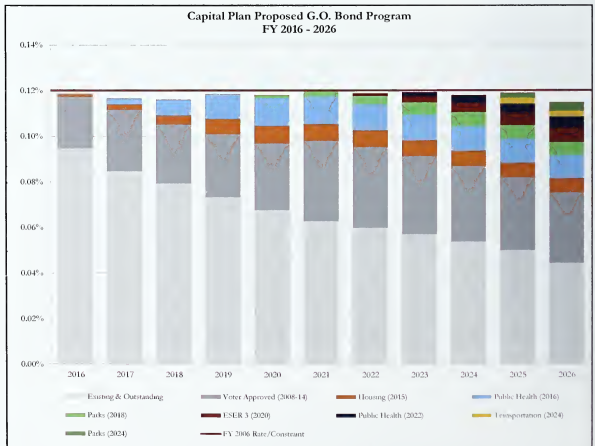
G.O. Bond Debt Program

(Dollars in Millions)

	<i>Proposed Debt Issuance</i>	<i>Amount</i>
Jun 2016	Public Health	\$311
Nov 2018	Parks and Open Space	\$185
Nov 2020	Earthquake Safety & Emergency Response	\$290
Nov 2022	Public Health	\$300
Nov 2024	Transportation	\$500
Jun 2024	Parks and Open Space	\$185
G.O. Bond Debt Total		\$1,771

The following chart illustrates the impact on the local tax rate of issued, expected, and proposed G.O. bond debt. The space between the 2006 tax constraint red line and the chart's bars illustrates the projected unused capacity for each year. Capacity is largely driven by changes in assessed value (AV) within the City. The recent economic boom has increased AV growth over the past several years but there is an expectation that this will level off as the economy cools. This means that less revenue may be generated should the city experience a recession without changing the tax rate.

General Fund Debt Program Highlights



Unlike G.O. bonds, lease revenue bonds and Certificates of Participation (COPs) are typically repaid from the City's General Fund or revenue that would otherwise flow to the General Fund. The City utilizes lease revenue bonds and COPs to leverage General Fund receipts, such as fees and charges, to finance capital projects and acquisitions, many of which provide direct revenue benefit or cost savings. Debt service payments for lease revenue bonds and COPs are typically paid from revenues of the related project, or fees, taxes or surcharges imposed by users of the project. Below is an overview of the Capital Plan Proposed General Fund Debt Program for the next ten years. Like the G.O. Debt Program, these estimates may need to be adjusted in future plans to account for new federal and state law, programmatic changes, site acquisition, alternate delivery methods, changing rates of construction cost escalation and/or newly emerged City needs.

The following chart illustrates debt service costs of existing and proposed COPs and lease

General Fund Debt Program

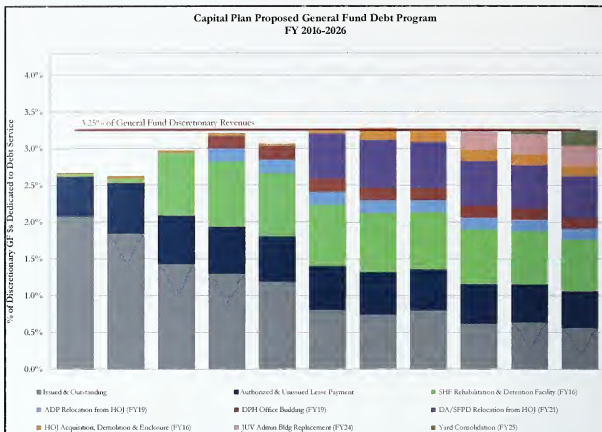
(Dollars in Millions)

	<i>Proposed Debt Issuance</i>	<i>Amount</i>
FY 2016	SHF Rehabilitation and Detention Facility	\$278
FY 2016	HOJ Site Acquisition	\$8
FY 2019	Adult Probation Relocation from HOJ	\$59
FY 2019	DPH Admin Building Relocation	\$60
FY 2021	DA and SFPD Relocation from HOJ	\$227
FY 2022	HOJ Land Purchase, Demolition & Enclosure	\$48
FY 2024	JUV Admin Building Replacement	\$107
FY 2025	Yard Consolidation	\$100
General Fund Debt Total		\$886

revenue bonds. These funds support critical city responsibilities such as project to relocate from the seismically deficient Hall of Justice, the JUV Probation Administrative Building, and effort to modernize the Public Works yard. The bottom portion of the columns represents debt service commitments for previously issued and authorized but unissued General Fund Debt, including the debt issued for the Moscone Centers, San Bruno jail, City office buildings in the Civic Center, and War Memorial Veteran's Building. New obligations are represented by the top portion of the columns starting in 2018.



Youth Guidance Center Admin Building



Enterprise & External Agencies - Program Summary

Unlike most of the General Fund Departments, many of the Enterprise Departments and External Agencies have dedicated systems and staff to develop capital plans. The following programs and estimated costs were compiled by Enterprise Department and External Agency staff with the guidance of their boards and commissions.

Enterprise Department Highlights

Capital investments for Enterprise Departments during the next ten years are approximately \$18.2 billion. This 28 percent increase from the FY 2014-2023 Capital Plan is the result of several large projects and programs described below:

The Central Subway, currently under construction, remains a high priority transit project for San Francisco and the single largest capital project in the SFMTA Capital Plan. Encompassing a 1.7 mile extension of the existing Third Street light rail line to Chinatown, the project's ten year total is \$589 million. It is expected to open by 2019.



Central Subway Construction

Other high priority transportation projects include projects related to the Muni Forward and Vision Zero programs, as well as transit fleet investments. The Transit Optimization Program (which includes the Transit Effectiveness Project (TEP), as well as wide ranging operational and capital improvements such as the Bus Rapid Transit projects) - calls for \$885 million over the next decade to make large scale improvements that will make transit faster and more reliable. The City's Vision Zero program - which focuses on increasing pedestrian safety in high injury corridors - includes \$99 million in

pedestrian safety infrastructure improvements over the next decade. Lastly, the Fleet Replacement Program to upgrade busses and light rail vehicles central to the transit system will receive nearly \$1.3 billion dollars in investments over the next ten years.

The Port continues to transform the City's waterfront through significant open space investments funded with proceeds from the 2008 and 2012 Clean and Safe Waterfront Parks General Obligation Bonds. Within the first five years of this Plan, the Port will make significant progress on six major open space projects totaling more than \$24 million. In addition to G.O. bond funded open space projects, the Port has a number of other large scale projects underway or in the planning phase including the rehabilitation and redevelopment of the heavily blighted historic Pier 70 area. The Pier 70 project, estimated to cost \$366 million, will rehabilitate historic resources, provide new shoreline open space, allow for new infill development, continue the historic ship repair operations and conduct environmental remediation and infrastructure improvements where required.



Pier 70 Waterfront site market rendering

The Sewer System Improvement Program (SSIP) continues to be one of the City's and SFPUC's largest capital programs. It calls for the annual replacement of approximately 11 to 12 miles of sewers at an annual cost of about \$53 million in the early years of this Plan and then ramps up to \$81 million annually, allowing for the replacement of roughly 15 miles per year; The goal of the program is to replace sewers once every 100 years.

SFO remains committed to improving its terminal complex and other critical support facilities to accommodate growth and enhance the customer experience. At approximately \$3 billion, the Airport's Terminal Program is the largest investment category within SFO's 10-year Capital Improvement Program. The program will fund major terminal renovations and upgrades, including the Terminal 1 and Terminal 3 renovation projects, the new Air Traffic Control Tower, which is currently under construction, and a new hotel. SFO also continues to increase runway safety, by investing nearly \$336 million into its Airfield Improvement Program which encompasses the federally mandated Runway Safety Area (RSA) project.



Terminal 1 Renovation Project rendering

External Agency Highlights

The Plan proposes funding \$8.5 billion in capital investments for external agencies, including the Office of Community Investment & Infrastructure (OCII) which is the Successor Agency to the Redevelopment Authority, and the San Francisco Unified School District and the City College of San Francisco. This represents a 45 percent increase over the last Plan. Major external agency capital enhancements include open space and streets and right-of-way investments within the Mission Bay North and South Redevelopment Project Areas ("Mission Bay"), the Hunters Point Shipyard Redevelopment Project ("Shipyard/Candlestick Point"), and the Transbay Redevelopment Project Area ("Transbay").

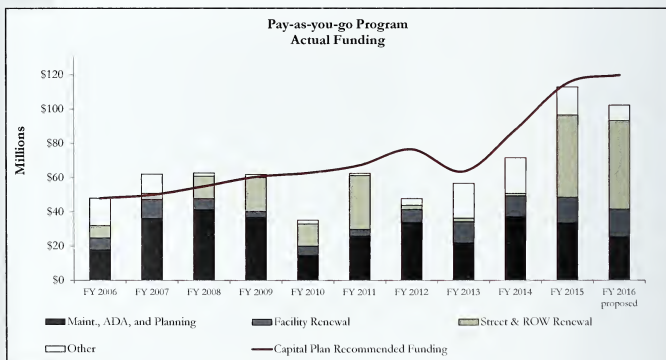
Capital Outlook

A growing Bay Area economy has given rise to historic capital investments in recent years. Spurred by a growing tax base, increases in General Fund revenues and the capacity to issue debt have allowed San Francisco to fund a record level of capital projects over the past two years. As a result, San Francisco is now better positioned to build a healthy and well balanced infrastructure program for future generations. However, it is important to note that despite recent accomplishments, continuing to strengthen the City's capital programs will be difficult.

While this Plan continues to recommend a historic level of funding, it defers \$3.5 billion in identified needs and fails to fully fund annual state of good repair needs until 2025. With this in mind, it is important that the City strive to take advantage of current economic conditions to achieve or exceed the recommendations of this Plan.

Reducing Backlog

Although the Plan's General Fund program addresses critical facility and infrastructure renewal needs over the coming decade, a significant funding gap still remains. Years of historic under-investment in the City's capital program has yielded \$544 million in the current General Fund department backlog of routine repair and renewal needs. Under this Plan, the City will not begin to address this backlog until FY 2031. The following chart compares actual funding with



the Capital Plan's recommendation. As the chart illustrates, the capital budget usually does not meet the Plan's specific Pay-as-you-go Program objectives, especially within the renewal category.

To address the gap, the City continues to investigate different capital approaches, including revising funding benchmarks, leveraging the value of City-owned assets as debt-financing vehicles, preparing projects for voter consideration at the ballot, forming public-private partnerships, and exploring new revenue sources. While a strong local economy has enabled the City to address some of its major infrastructure deficiencies, the City must continue to increase its capital investment to meet annual state-of-good repair needs and begin to tackle its growing backlog of deferred needs. If the City under-invests in its capital program the backlog

will not only grow, but repairs will become more expensive as construction costs increase and small preventative repairs become more expensive replacements and larger liabilities.

Other Challenges

There are a number of other remaining challenges that the City will face over the decade. These challenges, while not new to the Capital Plan, still merit discussion as the City will inevitably have to continue to manage their associated risks over the next ten years.

The private sector continues to drive up demand for construction services within the Bay Area, and with it overall construction costs. While construction activity helps buoy the local economy, the resulting increases in construction costs is something the City will have to diligently manage when considering, planning, and delivering infrastructure improvements and public construction projects.

Another challenge San Francisco continues to juggle is offsetting the impacts of new growth on the City's existing infrastructure. The current construction boom – most heavily felt within the formerly industrial, eastern side of the City – is increasing the demand for, and usage of: transit, open space and streets, and right-of-way infrastructure. As a result, the City has three distinct, yet related capital issues to tackle: (1) continuing to fund costly capital improvements that accommodate growth; (2) balancing growth related capital investments with state of good repair funding; and (3) planning for increases in annual operating and renewal needs associated with newly constructed infrastructure.



SFGH Bridge Tenders

Finally, increasing the City's resiliency – the time it takes to respond to and recover from an earthquake, disaster, or other event – is a challenge that continues to be a top priority of this Plan. As a densely populated aging city that is situated between two fault lines and surrounded by water on three sides, San Francisco must be particularly vigilant in developing and implementing policies and programs that improve the overall resiliency of its infrastructure. To date, the City has made enormous strides in investing in resilient infrastructure, as well as developing policies that help ensure the City responsibly and efficiently plans for the future. The chapter on Resiliency and Capital Planning Initiatives describes some of the efforts San Francisco is taking to address sea level rise and to better withstand and recover from an earthquake or other natural disasters.

Outlook Overview

As mentioned earlier, San Francisco is riding a historic wave of capital investments that has led to stronger, more resilient infrastructure. These investments have better positioned the City to weather ongoing infrastructure challenges – such as tackling capital backlog, planning for growth, and increasing resiliency to earthquakes, sea-level rise and other disasters – well into the future.

Aligning the City's capital budget with the Plan's recommendations will continue to be a challenge; however the City has taken many steps within the past two years that demonstrate its commitment to carrying out the Capital Plan's recommendations. These include but are not limited to: increasing the General Fund contribution within the capital budget; developing

“smart” General Obligation and General Fund Debt Programs that tackle critical needs; and developing robust strategies for addressing infrastructure associated with projected growth and increasing resiliency.

This Capital Plan continues to put forth a robust plan that balances maintaining current assets in a state-of-good repair with investing in new infrastructure. While the risks associated with rising construction costs, a growing capital backlog, and a potential economic slowdown (or downturn) persists, the City’s capital program is undoubtedly much better positioned than it was when the first ten year capital plan was written in 2006.





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Resiliency and Capital Planning Initiatives

A fundamental responsibility of the City and the Capital Planning Committee is to develop and implement policies and programs to improve the overall resiliency – the time it takes to respond to and recover from an earthquake, disaster or other event – of San Francisco's infrastructure. These efforts, as well as planning initiatives the Capital Planning Program (CPP) is undertaking to enhance interdepartmental coordination, enhance capital reporting, data collection, and improve capital planning processes are described in this chapter.

1. Resiliency Efforts

100 Resilient Cities Initiative and the Chief Resiliency Officer. San Francisco was one of the first cities to receive a grant from the Rockefeller Foundation 100 Resilient Cities (100RC) program. 100RC is dedicated to helping cities around the world become more resilient to the physical, social and economic challenges that are a growing part of the 21st century. The program supports the adoption and incorporation of a view of resilience that includes not just preparing for shocks – earthquakes, fires, floods, etc. – but also the stresses that weaken the fabric of a city on a day to day or cyclical basis.

In April of 2014, San Francisco hired the world's first Chief Resilience Officer (CRO). The position reports to the City Administrator and is tasked with establishing a resilience vision for San Francisco by working across departments, and with the local community to maximize innovation, and minimize the impact of unforeseen events.

Starting in 2015, the 100 RC initiative will work on five key focus areas described below:

- Strengthen the community's ability both to respond to a disaster and the capacity to recover after a disaster;
- Better understand the vulnerability of the city's existing housing stock to improve the ability for residents to return to their homes after a disaster;
- Explore how more resilient designs can help address San Francisco's housing needs for the 21st century.
- Assess community understanding of climate related threats and ability to adapt to changing environment; and
- Work with the CPP and Capital Planning Committee to further understand and assess the vulnerability and risk of the city's critical infrastructure to natural hazards.

The CRO is also responsible for the Earthquake Safety Implementation Program (ESIP) and staffs the Lifelines Council. Both of these programs are described under the section on Earthquakes and Major Disaster below. For more information on the CRO, please see www.sfgov.org/resilientsf.

2014 City and County of San Francisco Hazard Mitigation Plan. The 2014 San Francisco Hazard Mitigation Plan (HMP) represents the City's commitment to reduce the impact and likelihood of hazards from earthquakes and other natural or human-caused threats, and to create a safer, more resilient community. The HMP provides an assessment of the risks to San Francisco from earthquakes, tsunamis, and other hazards, and develops mitigation strategies for reducing the impact of those hazards. In November 2014, the HMP received final approval from Region IX of the Federal Emergency Management Agency (FEMA). FEMA approval of the plan is required for the City to be eligible for federal disaster relief such as pre- and post-disaster hazard mitigation and flood mitigation grant funding.

Seismic hazards pose the greatest risk of loss to San Francisco. Nearly all of San Francisco's people, residences, and essential facilities and infrastructure are located within the very violent and violent shaking intensity hazard areas for a large magnitude earthquake on both the San Andreas and Hayward Faults. The HMP provides a list of 22 mitigation strategies, which are specific activities, projects, or measures the City can take to reduce or eliminate risk to people and property from hazards. Several of these strategies and their related projects are either underway or covered in the Public Safety chapter of this Plan. These include:

- Upgrading of the Emergency Firefighting Water Supply System also known as the Auxiliary Water Supply System to brace weak pipes and cisterns, add new cisterns, and make other improvements to ensure its continued operation after a disaster;
- Relocating the Office of Chief Medical Examiner and the San Francisco Police Department Forensic Services and

Traffic Company to seismically safe structures;

- Seismically upgrading the Treasure Island Causeway to preserve critical lifeline access to the island and to protect the utility corridor that runs under the causeway;
- Seismically retrofitting or upgrading Recreation and Parks Department facilities and shelters; and
- Updating or assigning an additional 50 Seismic Hazard Ratings to city-owned buildings using the City's rating system (see Seismic Hazard Ratings below).

Sea Level Rise

Surrounded by water on three sides, San Francisco faces serious challenges related to accelerating sea level rise this century. With this in mind, the City is taking on a number of planning efforts to better understand and prepare for the effects of sea level rise (SLR).

Sea Level Rise Guidelines. In 2013, Mayor Lee asked an interdepartmental working group to propose a response strategy to the risks sea level rise poses to San Francisco's public infrastructure. A Sea Level Rise Committee (SLR Committee) was formed, consisting of staff from the primary infrastructure departments, the Planning Department, the Capital Planning Committee (CPC), and two consulting firms experienced in sea level rise.

The SLR Committee investigated the science behind SLR projections; reviewed approaches taken in other jurisdictions locally, regionally, and nationally; and drafted the first guidance that provides an adaptation-planning road map for infrastructure managers in the country. This document, called "Guidance for Incorporating Sea Level Rise into Capital Planning in San Francisco: Assessing Risk and Vulnerability in Support of Adaptation" (Guidance), was adopted by the Capital Planning Committee on September 22, 2014.

The Guidance presents the upper and lower bounds of anticipated SLR through the year 2100, as well as projections of a middle range, or more likely level, for SLR. The diversity in these projections (e.g. 17-66 inches by 2100, with 36 inches most likely) pose one challenge of planning for futures characterized by great uncertainty – neither minimizing the threat of SLR nor reacting exclusively to the worst projections make for effective adaptation planning. The Guidance outlines a process for considering all these ranges and incorporating uncertainty into planning. In addition, the Guidance integrates consideration of storm surge alongside SLR to comprehensively address the threat of flooding, both temporary and permanent, along San Francisco's shorelines.

Sea Level Rise Estimates for San Francisco Relative to the Year 2000

Year	Projections	Ranges
2030	6 ± 2 in	2 to 12 in
2050	11 ± 4 in	5 to 24 in
2100	36 ± 10 in	17 to 66 in

The Guidance describes a four step process for projects over \$5 million that are in areas susceptible to sea level rise. The steps are described below:

1. Determine which SLR and storm surge projections apply to each infrastructure project based on asset life cycle;
2. Using inundation maps created by the SFPUC in 2014 identify the exposure, sensitivity, and "adaptive capacity" of assets to SLR. Adaptive capacity – defined as an asset's inherent

The Capital Planning Program addresses seismically vulnerable publicly-owned infrastructure, while the Earthquake Safety Implementation Program focuses on vulnerable privately-owned infrastructure. This includes recent legislation requiring soft-story retrofits and seismic evaluations of private schools.



ability to adjust to SLR impacts without significant intervention or modification – allows departments to navigate the uncertainties inherent in adaptation planning, particularly for long-lived assets;

3. Evaluate the risks and potential costs of inundation of the asset, as a means for prioritizing investment; and
4. Develop an adaptation plan for assets sensitive to SLR risk during their life cycle.

A SLR Checklist was created to help departments and project managers implement the Guidance and report findings to the Capital Planning Committee (CPC). The CPC will work the City Engineer to review departmental compliance and overall resilience for vulnerable projects. As of the date of this report, departments had submitted completed checklists for 60 projects.

Adapting to Rising Tides Along Mission Creek

On the eastern waterfront of San Francisco, Mission Creek is one of the city's lowest-lying areas and is vulnerable to flooding from both sea level rise and storm surges. In early 2014, the city launched the Mission Creek project to better understand the area's vulnerability to these threats, and to develop resilient adaptation concepts for retrofitting the shoreline. This project is a unique international partnership, bringing resources from the Delta Alliance (of the Netherlands) to match funding provided by five city departments: the Port, the SFPUC, the Planning Department, the Public Works Department, and the Capital Planning Program. SPUR manages the project on behalf of the City, and the Bay Conservation and Development Commission serves in an advisory role. Other key public and private partners include OCII, the Mission Bay Development Group and the San Francisco Giants. The Dutch engineering firm ARCADIS and think-tank Alterra are the project's consultants.

Besides building capacity within the City to address the risks of sea level rise and flooding, this project sought to test and refine adaptation planning ideas used in both California and the Netherlands, and exchange best practices.

The project utilized existing engineering evaluations and sea level rise maps created for the SFPUC to characterize vulnerability for specific City assets (such as the 3rd and 4th Street bridges, the Channel Pump Station, AT&T Park, Piers 40, 48 and 54, and more) as well as regional vulnerabilities within the project area. Looking at 100 year storm flood levels on top of 12 inches of potential future sea level rise in 2050 and 36 inches by 2100, the project team determined that the entire region, rather than specific assets, required a solution due to the risk of significant (but infrequent) inundation.

The project profiled in-depth three adaptation concepts for the Mission Creek shoreline, four concepts for the Bay shoreline, and four concepts for the piers. Structured around the idea of creating "lines of defense", the concepts range from raising seawalls, to filling and creating tidal basins in the creek and in the bay through an outboard levee, to building a tidal gate across the mouth of Mission Creek that could be closed during extreme high tides (see the diagram below). One unique opportunity in Mission Bay could be a "living with water" approach such as that used in Hafencity, Hamburg (Germany) where the neighborhood is designed to have floodable streets and public spaces during extreme high tides.

The project report, which will be released in early 2015, does not select or favor certain adaptation concepts over others. Rather, by laying out several viable options, it creates an opportunity to advance public engagement about sea level rise and the need to manage it through urban planning and design. It also creates a model for interdepartmental collaboration and public-private partnership that San Francisco and other cities may find useful to understand, characterize and mitigate future climate change risks.

In this conceptual rendering, a tidal gate across Mission Creek can protect a broad area of both Mission Bay and South of Market from flooding due to major storm surges.



In this conceptual rendering, a tidal gate across Mission Creek can protect a broad area of both Mission Bay and South of Market from flooding due to major storm surges.

Earthquakes and Major Disasters

A number of factors contribute to San Francisco's vulnerability to earthquakes. In addition to being situated between two major earthquake faults (San Andreas to the west and Hayward to the east), San Francisco has some of the most densely populated neighborhoods in the country and very old structures that along with the city's windy conditions contribute to the spread of fires started by earthquakes. San Francisco's is also surrounded by water on three sides which making it very susceptible to the seismic impacts on sea level rise. Furthermore, a significant portion of the City is infill resulting in liquefaction risk that further increases vulnerability.

Experts predict that there is a 63 percent chance that the Bay Area experiences a major earthquake within the next 30 years. The below maps illustrate the City's susceptibility to ground shaking under four different earthquake events, as well as the City's susceptibility to liquefaction. The Plan seeks to limit risks associated with these vulnerabilities by recommending capital investments to make City infrastructure more resilient.

Since the 1989 Loma Prieta Earthquake, San Francisco has aggressively pursued projects to enhance the seismic safety of its facilities and infrastructure. In fact, it is estimated that spending to seismically improve publicly-owned assets within city limits over that time period tops \$4.5 billion. Another \$5.5 billion was spent on assets outside the city that are related to improvements by the SFPUC and SFO. The projects range from million dollar structural repairs at a recreation center to the billion dollar improvements to the system that delivers City water from the Hetch Hetchy reservoir across seven earthquake faults. A map showing some of these projects can be found online at <http://onesanfrancisco.org/shake-shake-shake/>.

Over the past several years, the City has strived to better understand how its infrastructure will

respond to specific sized earthquakes and what efforts can be made to improve vulnerable assets before a major event occurs. This information enables the City to better understand and prioritize seismic improvements including the Great Seawall, Hall of Justice Replacement Program, San Francisco General Hospital Building 5, 101 Grove, the Animal Shelter and several others projects discussed throughout this Plan. A description of these initiatives is listed below.

Seawall Seismic Risk Analysis. The Great Seawall provides flood protection to four miles of the City's waterfront from Fisherman's Wharf to AT&T Ballpark and is a critical component to maintaining the integrity of the City's utility infrastructure system, the City's regional transportation infrastructure, and historic bulkhead buildings that line The Embarcadero. The Seawall was built in segments over 37 years, starting in 1879, prior to the development of modern engineering techniques to address liquefaction and seismic risks.

In 2014, the City through the Port Commission authorized an earthquake vulnerability study of the Seawall to look at the earthquake safety of this portion of the waterfront. A major goal of this analysis is to produce a conceptual seismic design for the seawall and bulkhead wharves that can be incorporated into the next update of the City's 10-Year Capital Plan. Specific objectives include:

- Analysis of earthquake behavior of the seawall, bulkhead wharves, and adjacent infrastructure including the Embarcadero Roadway;
- Assessment of earthquake damage and safety risks, including SFPUC, BART and MUNI infrastructure
- Forecast of economic impacts;
- Development of conceptual level earthquake retrofits for the seawall and bulkhead wharves;
- Prioritization of future improvements and/or further study needs.

The Study results will also assist the City and Port in planning for and implementing adaptation measures necessary to address sea level rise and climate change. See the Port section of the Economic Development Chapter for additional information on this analysis.

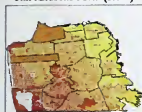
Earthquake Loss Estimation Study (HAZUS). In 2013 the Capital Planning Program (CPP) completed its final earthquake loss estimation study. In total, the CPP evaluated 214 high-priority city buildings using a standardized methodology tool developed by FEMA called Hazards-United States (HAZUS). HAZUS uses geographic information systems (GIS) data to estimate physical and economic impacts for specific earthquake scenarios. San Francisco is the first known municipality to apply the HAZUS methodology at the individual building level. The results of the two studies are being used to help inform capital and emergency response planning decisions. A summary of the results of the 211 buildings is shown on the following page.



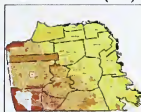
Base Isolators going in at SF General Hospital Trauma Center

Earthquake Scenarios (with USGS 30 year probability)

San Andreas M7.9 (3.8%)



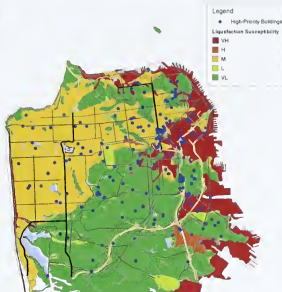
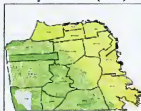
San Andreas M7.2 (0.6%)



San Andreas M6.5 (N/A)



Hayward M6.9 (9.9%)



HAZUS Results (214 Buildings)

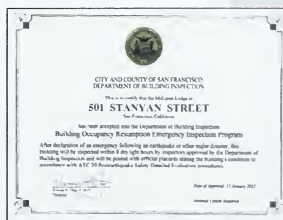
(Dollars in Millions)

	Hayward M6.9	San Andreas M6.5	San Andreas M7.2	San Andreas M7.9
Structural Damage	85.2	114.4	183.0	313.3
Non-Structural Damage	306.8	440.6	727.9	1324.7
Subtotal Building Damage	392.0	552.0	911.0	1,638.0
Content Damage	80.9	217.9	295.1	447.6
Operational Losses; Rent, Relocation & Lost Income	94.3	119.8	197.5	318.3
Total Economic Impact	567.1	889.6	1,403.6	2,403.9

Seismic Hazard Ratings (SHR). In 1992 San Francisco developed SHRs for over 200 of its public buildings that were used to assess risk and prioritize seismic-strengthening capital improvements. Rated on a scale from one (best) to four (worst), the City has addressed nearly all the SHR fours and many of the SHR threes. Since the initial development of the SHR ratings, building codes have improved and structural knowledge has been gained from earthquakes around the world. Updating the ratings is important for the future prioritization of seismic.

Building Occupancy Resumption Program (BORP) of City-Owned Buildings. After a major earthquake it can take days or weeks for building inspectors to inspect each building for structural damage and determine whether it is safe for occupancy. To prioritize critical facilities and reduce inspection times, building owners may apply to the Department of Building Inspection's (DBI) BORP. The inspection program is the first of its kind in California for privately- and publicly-owned buildings and will enable San Francisco to restore services with minimal delay. The City has eight buildings in the program and is in the process of submitting several more. These include buildings that are expected to perform well such as City Hall and those that are expected to perform poorly such as McLaren Lodge (built in 1895).

Energy Assurance Planning (EAP). Energy assurance focuses on minimizing energy interruptions during emergencies. The California Energy Commission is sponsoring the California Local Energy



Assurance Planning (CaLEAP) project to assist local governments in preparing energy assurance plans. San Francisco is one of the leading local governments in the Bay Area to participate in CaLEAP, and is in the development phase of its first EAP. The Capital Planning Program worked with the Department of Environment and the Public Utilities Commission to draft a strategy for creating an EAP that was completed in 2013.

Infrastructure Branch Working Group. The Infrastructure Branch Working Group is an interdepartmental group focused on the recovery of the City's publically-owned infrastructure after a major earthquake. The Group is currently updating the Safety Assessment Guide to include a section on coordinating a City response to a mutual aid request and will be investigating the adoption of a single citywide data collection and mapping tool that can be used by multiple departments.

Lifelines Council. The Lifelines Council connects more than 25 local and regional lifeline agencies that operate in San Francisco, including power, natural gas, water, telecommunications, transportation, debris management, and emergency response. The Council works to develop and improve collaboration among these agencies, both within the City and across the region, by establishing a means by which agencies regularly share information about recovery plans, projects, and priorities, and establish coordination processes for lifeline restoration and recovery following a major disaster. In April of 2014, the Council approved the Interdependency Study that looks at how all critical lifeline systems interact with each other, as well as the consequences of an earthquake on existing conditions and restoration efforts. The recommendations from the Study are incorporated into a five-year work plan that the Council is currently undertaking.

Earthquake Safety Implementation Program (ESIP). ESIP is a 30-year plan to implement the recommendations of the Community Action Plan for Seismic Safety (CAPSS) project, which was released in December 2010. The CAPSS report recommends fifty key tasks that will enhance the resiliency of San Francisco's private building stock. The ESIP program is overseen by the City Administrator and the Director of Earthquake Safety. This program has already passed over 11 pieces of seismic safety related legislation including the required retrofit of residential soft story buildings, requiring evaluations of private schools, and providing innovative financing programs for private property owners to be able to make these improvements.

2. Capital Planning and Interdepartmental Initiatives

In addition to resiliency efforts, the CPP is working on a number of interdepartmental planning initiatives to enhance capital reporting and data collection, and improve capital planning processes. These are described below:

American Disability Act (ADA) Transition Plan. To comply with the Americans with Disabilities Act (ADA) and disability requirements under ADA Title II for state and local governments, the City maintains an ADA Transition Plan for buildings and facilities. First developed in 2000 and updated in 2004, the plan represents a dynamic process to assess and mitigate structural barriers in City-owned and leased facilities. In addition, the City maintains an ADA Transition Plan for Curb Ramps and Sidewalks. Both plans set forth steps necessary to enact structural changes through barrier removal projects, new construction or alterations, and a schedule for those changes. The CPP works closely with the Mayor's Office on Disability (MOD) and City departments to ensure that the ADA Transition Plan recommendations, along with other ADA improvements, are incorporated into the City's Capital Plan, the capital budget, and other project planning efforts.

Interagency Planning Implementation Committee (IPIC). The Interagency Planning Implementation Committee (IPIC) prioritizes and makes recommendations on infrastructure projects identified in Area Plans adopted by the City. More information on these Area Plans and IPIC can be found in the Planning section of the Economic Development Chapter of this Plan.

Advanced Capital Planning for Streets Working Group. The Streets Capital Group (SCG) jointly chaired by the CPP and the Planning Department was created to ensure strong departmental coordination across infrastructure projects in the street and public right-of-way.

This includes tracking short and long term projects, and making recommendations to department heads and the CPC regarding funding priorities. The working group meets quarterly and includes representatives from SFMTA, SFPUC, DPW, Office of Economic and Workforce Development, the San Francisco County Transportation Authority (SFCTA), and others.

General Fund Quarterly Project Reporting. In 2013 the CPP began its quarterly reporting program which is designed to increase transparency around capital spending. This was recently enhanced in 2014 to include information on project schedules. Each quarter department finance officers and project managers are required to verify project spending and schedule information. CPP staff use this data to analyze capital spending trends, monitor capital projects progress, and inform capital budget decisions.

San Francisco Citywide Capital Project Database. The CPP is leading an effort to create a centralized repository and hub to house project information in a standard format that is easily accessible to decision-makers, staff, and the general public. The goal is to leverage existing tools to streamline project reporting, improve interdepartmental coordination and project integration, and develop a standard project interface. This initiative is a collaborative effort that includes the City's Chief Data Officer, the Controller's Office, and the Public Works Department.

General Fund Facility Database Effort. The CPP is working with the Department of Technology, the Department of Real Estate, and the Public Works Department to enhance the City's ability to better understand facility needs and costs. The goal is to leverage asset management and other information technology tools to develop a centralized database for all General Fund assets.

Infrastructure Service Level Analysis. In 2013, the CPP in conjunction with the Planning Department completed a comprehensive study that evaluated current levels of service for five public infrastructure categories including: open space; recreation and childcare facilities; transit; and streets and right of way. The study also proposed both short and long level of service goals that help inform policy decisions related to prioritizing capital projects across San Francisco neighborhoods.

Transferable Development Rights (TDRs) Study. The Planning Department along with CPP and the Department of Real Estate developed published a study on San Francisco's market for acquiring and selling TDRs in the summer of 2013. Since the mid-1980s, the Planning Department has administered a TDR program that enables certain historic properties to sell their unused development rights to certain non-historic properties. The key goals of the TDR program are to maintain Downtown's development potential while protecting historic buildings incentivize maintenance and upkeep of historic buildings, and direct Downtown development to appropriate areas. The results of this analysis led to the passage of legislation in early 2014 authorizing the Director of Real Estate to sell up to \$14 million in TDRs with the proceeds going back into the building from which they came.

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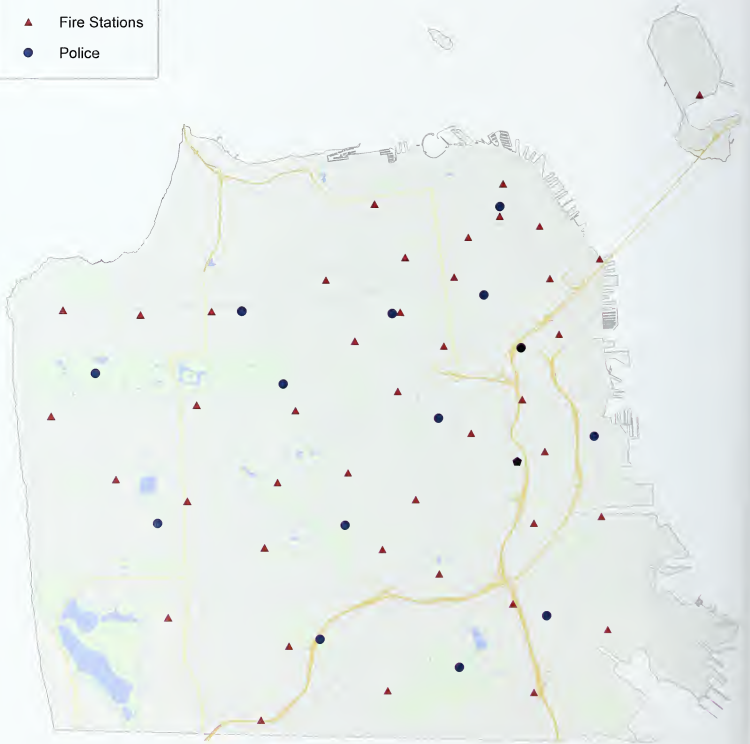
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Public Safety Facilities

Legend

- ◆ Sheriff
- ▲ Fire Stations
- Police



Highlights and Accomplishments

Considering the vital services public safety personnel provide and the fact that the majority of their facilities are over half a century old, it is understandable that the Plan makes considerable investments in this area. It recommends \$1.6 billion to seismically improve, renovate, and replace critical public safety infrastructure. The sources of these funds are a mix of G.O. bonds, COPs, General Fund, and various other sources.

The majority of the public safety investments focus on replacing the seismically deficient Hall of Justice (HOJ) and upgrading firefighting facilities and key infrastructure. A big step toward addressing the HOJ and improving fire facilities came through passage of two Earthquake Safety and Emergency Response G.O. Bonds in June of 2010 (ESER 2010) and 2014 (ESER 2014) in June 2014. A third bond, ESER 2020 to continue this work is scheduled for the November 2020 ballot.

In addition to the G.O. bonds, the City made significant progress in relocating the remaining functions at the HOJ. This includes much more refined plans to replace Jails #3 and #4, currently located on the top two floors of the HOJ, with a much smaller Rehabilitation and Detention Facility. And for the first time, the Capital Plan shows the exit of all the remaining city functions and the demolition of the west wing of the Hall within ten years. These functions include the District Attorney, Police Investigations, and Adult Probation Offices.

Additional accomplishments since the FY 2014-2023 Capital Plan include the following:

- Completed construction of the new Public Safety Building at 3rd and Mission Rock. This building is the new home for Police Headquarters, Southern District Station, and a new fire station (Station #4). The project also rehabilitated historic Fire Station 30 to provide a community meeting room and a new office for the Fire Department's Arson Task Force.
- Purchased land and assembled the architectural and engineering team to relocate the Office of the Chief Medical Examiner (OCME) from the HOJ to 1 Newhall Street. Construction of the new facility is scheduled to start in mid-2015 and finish in early 2017.
- Identified a site and completed functional programming to relocate the SFPD Traffic Company and Forensic Services Division from the HOJ and Building 606 at Hunters Point Shipyard, to 1995 Evans Avenue.
- Funded upgrades to 25 of the 42 operating Fire Stations as well as development plans for the Fire Boat Station 35 at Pier 22½. Projects were defined among three categories of work – Focus Scope, Comprehensive and Seismic, and considerable progress has been made in advancing projects to completion. This includes Focus Scope improvements at 20 Stations, two Comprehensive remodels at Stations #34 and #44, and final designs for two replacement stations due to Seismic issues at Stations #5 and #16.
- Completed the Auxiliary Water Supply System (AWSS) Planning Study to analyze the system and recommend improvements to increase the seismic safety and water delivery from cisterns, pipelines, and tunnels for fire suppression. The Study established post-disaster water reliability standards to evaluate and prioritize projects.

ESER 2010 bond for \$412.3million passed in June 2010 and ESER 2014 bond for \$400 million passed in June 2014. The third ESER bond for \$290 million is slated for November 2020.



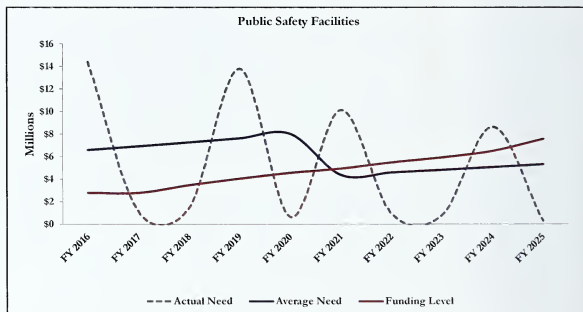
The new Public Safety Building

The new Rehabilitation and Detention Center has 43% fewer beds than the seismically unsafe Jail #3 and Jail #4. Even with the reduction in beds, the Center will provide 60% more space for rehabilitation services and facilities compared the current jails.

- Constructed or in the process of constructing 30 cisterns, 16 will be completed by the Summer of 2015 and the remaining 14 in 2016; providing seismic strengthening of the Jones and Ashbury tank houses and the Twin Peaks Reservoir by the Fall of 2015; and designing nine pipeline and tunnel improvement projects across San Francisco.
- Completed the Police Department District Station Facility Evaluation and Standards Study in 2013. The Study evaluates the functional adequacy of police facilities and defines the space, functional, technical, safety, and security requirements for the design of new or renovated buildings. The evaluations looked at nine district stations, the police academy, and Golden Gate Park Stables.
- Finished several renewal projects at Police and Sheriff Department facilities. These included roof replacements, chiller and HVAC upgrades, stable renovations, and various other repairs.
- In the process of implementing \$2.1 million in facilities upgrades and completing two facility master planning efforts for the Juvenile Probation Department.

1. Renewal Program

Capital Planning's Facility Renewal Resource Model (FRRM) projects \$129.2 million in renewal needs for Public Safety facilities over the next ten years not including existing backlogs. Given funding constraints, the Plan allocates \$48 million in GF dollars to meet the needs. Funding from the remaining and future ESER G.O. bonds will also be invested in fire and police facility renewals.



Monthly reports and additional on the Earthquake Safety and Emergency Response Bond Program can be found at searthquakesafety.org.

2. Enhancement Program (FY2016 – FY2020)

The projects in the first five years of the Plan are funded through a mixture of G.O. Bonds and COPs.

Earthquake Safety and Emergency Response Bond Program. The ESER program is designed to save lives, protect property and help to assure prompt economic recovery after a major earthquake or other disaster. Funding for ESER is through G.O. bonds passed in 2010 and 2014 and new bond slated for the ballot in November 2020.

- **ESER 2010.** This \$412.3 million bond addresses core components of AWSS, improves neighborhood fire stations, and provides for a seismically safe police headquarters and new

fire station in Mission Bay. To date, \$387 million in ESER bonds have been sold with the remaining \$25 million for Neighborhood Fire Stations to be sold in early FY 2015. A large portion of these funds will go toward the Station 35 at Pier 22.5.

- **ESER 2014.** The second ESER G.O. bond designates \$400 million to continue the AWSS and Neighborhood Fire Station work initiated in ESER 2010, relocates two major public safety facilities, and funds critical police station improvements. These projects include moving the Office of the Chief Medical Examiner (OCME) and the Police Department's Traffic Company and Forensic Services Divisions from the Hall of Justice and Building 606 at Hunter's Point Shipyard to 1 Newhall and 1995 Evan Street respectively.
- **AWSS core facilities (pump stations, storage tanks, and reservoirs), cisterns, pipes, tunnels, and related items.** The work will be guided by the AWSS Planning Study along with consideration of alternative water delivery methods. The AWSS projects are also discussed in the SFPUC section of the Infrastructure and Streets Chapter within this Plan. The bond funds \$55 million for this effort.
- **Fire Station and Facility improvements.** This continues the work to provide Seismic, Comprehensive and Focused Scope improvements started in the ESER 2010 bond. ESER 2014 adds another \$85 million to this effort. The work will touch approximately 20 fire houses.
- **District Police Stations to make seismic and other improvements.** The District Station Facility Evaluation and Standards Study prepared in 2013 and currently being updated matches the impact of future policing needs and trends with current facilities. This Study will help to define and prioritize the projects to be funded by the ESER 2014 bond. The bond provides \$30 million for these improvements.
- **SFPD Traffic Company and Forensic Services Division (FSD) new facility at 1995 Evans Street.** The FSD is currently located at two facilities; its Administration, Crime Scene Investigations and Identification units at the HOJ, and the Forensic Sciences (a.k.a. Crime Lab) Laboratory at Building 606 in the Hunters Point Shipyard. The SFPD Traffic Company is also located at the HOJ. Construction is anticipated to start in Summer of 2017 and end in late 2019. The bond funds \$165 million for this project.
- **Office of the Medical Examiner to relocate from the HOJ to a seismically safe facility at 1 Newhall Avenue in India Basin Park.** Storage for mass fatalities after a large disaster as well as an improved autopsy suite and toxicology laboratory, will be provided. Construction is planned to begin in May 2015 and end in early 2017. The bond funds \$65 million for this project.



Cistern Construction



Turkey's Police Station



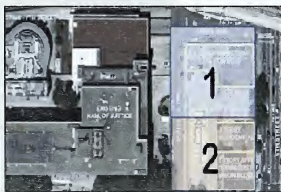
New Proposed Medical Examiner Building

Public Health and Safety Bond Program. The Plan recommends a \$311 million Public Health and Safety bond for the June 2016 ballot. Two critical projects funded by the bond are described below while the remaining facilities are described in the Health and Human Services Chapter.

- **Animal Care and Control Facility Renovation and Seismic Retrofit.** The City's current animal shelter located at 1200 15th Street is a seismically vulnerable building constructed in the 1931. Considering the role of Animal Control Officers and the importance of providing a safe place for wildlife and pets to be housed for general public safety and especially after a natural disaster, the replacement of this facility is an important priority. Schematic designs

and costs models have been completed, recommending facility improvements to increase seismic safety, enhance workflow and customer experience, strengthen disease control, and integrate new design standards for animal housing that boost animal adoptability. The bond funds \$49 million for this project.

- **Fire Department Ambulance Deployment Center Relocation.** The existing ambulancy deployment facility is located in an overcrowded and outdated warehouse that can only restock one ambulance at a time in a single bay. Crew support spaces, such as locker rooms and showers are currently serving more than twice their capacity and training for ambulance drivers and other medical personnel have to take place on Treasure Island. All of these factors limit the rate at which ambulances can be returned to duty. The new facility will be built to a higher seismic performance standard, provide four ambulance bays, and include on-site training rooms. It will also provide off-street parking for SFFD fleet vehicles and re-stocked ambulances awaiting deployment. The bond funds \$40 million for this project.
- **Treasure Island Neighborhood Fire House Replacement.** The current fire station at Treasure Island was recently evacuated due to mold issues and is slated to be torn down in accordance with the Island's redevelopment plans. While a temporary station will be constructed in 2015, a permanent station to serve current and future residents, businesses, parks and hotels is needed. The new station is proposed to be constructed in 2020 for \$20 million. For more information on Treasure Island, please see the The Treasure Island / Yerba Buena Island Development Project under the Economic and Neighborhood Development section.



Area 1 above shows the proposed location of the new Rehabilitation and Detention Facility. Area 2 is for future court-related facilities.

Rehabilitation and Detention Facility (RDC) Project (County Jails #3 and #4 Replacement). A high priority of the 10-Year Capital Plan since its inception, this project relocates prisoners housed in Jails #3 and #4 atop the HOJ. The current jails are in a seismically unsafe building built in the 1950s that offers very little space for rehabilitation programming. The RDC would provide a secure and modern detention center that supports San Francisco's commitment to inmate safety and rehabilitation at a location within city limits and directly adjacent to the Superior Court. To determine the appropriate size of the new facility, the Controller's Office has been examining population trends and issues related to overall inmate population since 2012. The current forecast estimates a need for 512 beds by 2019. This is 43 percent fewer beds than the 900 bed current capacity of Jails #3 and #4.

The RDC is estimated to cost \$278 million that would be funded through the issuance of COPs beginning in FY 2016. The City hopes to reduce the amount of COPs it needs to issue by as much as \$80 million through State-issued revenue bonds for incarceration and rehabilitation facilities. The revenue bonds from the State are authorized through Senate Bill 1468 which provides \$500 million for large counties such as San Francisco.

Sheriff Department Comprehensive Facility Assessment. Funded through the FY 2014 capital budget, the City is studying the Sheriff department's programs and functions in relation to their current facilities. The final report will provide information for future capital planning efforts including the need for major or minor alterations and the potential for consolidation, relocation, or expansion of Sheriff Department facilities. The Study is expected to be completed in 2015.

Justice Facilities Improvement Program (JFIP) Plan Update. Originally developed in 2008 to begin the effort to replace the Hall of Justice, the JFIP has been updated to reflect current conditions and existing staff levels at the Hall of Justice and 555 7th Street which houses the Public Defender. The update focused on the relocation of the District Attorney, Police Investigations Division, and Adult Probation Department that will remain at the Hall of Justice after the Sheriff's RDF to replace Jails #3 and #4 is constructed.

The update found that about 15 percent of the space at 555 7th Street is occupied by Sheriff department programs that are expected to be relocated. Once that move takes place, the Public Defender will have sufficient space for its operations. Since 555 7th Street was constructed in 1985 and does not need to require a major remodel or seismic upgrade, it is likely to remain in operation for the foreseeable future. Having said that, the Public Defender operations will be considered along with other justice related departments as future plans are developed.

For all the departments with space remaining at the hall of justice, including the public defender, a more detailed space program will be developed to reflect specific workstation sizes and the common spaces; such as meeting rooms, confidential interview rooms, and evidence storage rooms, that are required to support effective delivery of the department's services. This information will support more refined relocation plans. The update was funded by the 2014 Capital Budget.

Land Purchase for the Hall of Justice Replacement. The Plan proposes \$7.5 million in COPs issued in 2016 to secure property on the site immediately adjacent to the Superior Court for City offices and rehabilitation functions that need to be close to the Superior Court and the new RDC.

Adult Probation Relocation from the Hall of Justice. The Adult Probation Department functions contained in the seismically deficient HOJ are to be relocated to a location near the Superior Court and the RDC. Based on information collected from the JFIP Plan Update, this project is expected to cost \$55.5 million that will be funded through COPs issued in FY 2019.

District Attorney and San Francisco Police Investigations Relocation from the Hall of Justice. The District Attorney Office and Police investigations functions housed in the seismically deficient HOJ are to be relocated to a location near the Superior Court. Since these two units work closely together, it is important that they are near each other. Based on information collected from the JFIP Plan Update, this project is expected to cost \$227 million that will be funded through COPs issued in FY 2021.

Juvenile Probation Facilities Master Plan. The Juvenile Probation Department has multiple aging facilities and related assets with significant capital needs. In response, the department is in the process of conducting a facilities assessment which will include an in-depth analysis of current and projected space needs based on anticipated population and future programming. The assessment will also include recommendations on strategies for addressing these needs and potential funding opportunities to pursue. It was funded through the capital budget.

3. Enhancement Program (FY2021 – FY2025)

Forty percent or \$550 million of recommended capital improvements to public safety facilities is in the second half of the Plan. These include the following projects:

ESER 2020. The third ESER bond program designates a \$290 million G.O. bond for the November 2020 ballot to continue improvements identified in ESER #1 and #2. It includes \$100 million for Neighborhood Fire Stations and key facilities, \$110 million for AWSS, and \$80 million for District Police Stations.

Demolition, and Enclosure of the Hall of Justice. The Plan proposes \$48.3 million in COPs issued in 2022 to tear down the west wing of the current Hall of Justice to free up land for the State to construct a new Superior Court. The project also funds enclosing the east wing of the Hall of Justice so the Superior Court can function while their new building is in construction.

Youth Guidance Center/JUV Administrative and Service Buildings Replacement. The Plan proposes \$106.6 million in COPs issued in 2024 to replace the current Administrative and Service Buildings. Built in 1950, these facilities house probation and administration functions for

Juvenile Probation, as well as kitchen services for Juvenile Hall and heating and power for the entire campus. In addition to seismic deficiencies, the facility has poor accessibility, antiquated plumbing and electrical systems, and a lack of proper programming space. These improvements are estimated at \$91 million. This project will be informed by the Juvenile Probation Facility Master Plan.

4. Deferred Projects

Even with these record investments, public safety needs are substantially higher than available funds, and the Plan defers several critical projects. These include the following:

Fire Department Training Facility Relocation and Expansion. No funding is proposed for this project due to funding constraints and uncertainty for development of Treasure Island. The department is interested in renovating or replacing the current training facilities at 19th and Folsom and on Treasure Island with a combined facility that includes training classrooms, apparatus storage, a vehicular training field, drill tower, live fire simulators, and a fireboat dock. The cost is estimated at \$132 million.

Log Cabin Ranch Improvements. A proposal to build several cottages to replace the existing dorm facility is also deferred from the Plan. These improvements are estimated at \$91 million. This project will be informed by the Juvenile Probation Facility Master Plan.

5. Emerging Needs

The level of investment required to meet the following capital needs are not funded, but will be reviewed in the future years.

Candlestick Development/Hunters Point Fire Station. The scope, size and budget for a new fire station to serve the development of the Hunters Point Shipyard not yet been established.

San Francisco Fire Department Bureau of Equipment Relocation. The Fire Department is requesting to relocate its Bureau of Equipment that serves the Department's field operations. This project will be considered along with the citywide Yard Consolidation Project that is discussed in the General Government section of this Plan.

Expansion, Renovation, Relocation of the Police Training Academy. The Police Department is requesting an improved training academy to accommodate programs for the 2,100 police officers in San Francisco as well as for other police departments in the region that use the academy. The current building does not have enough space to accommodate required training programs and may cause San Francisco to lose its regional certification.



San Francisco Police Training Academy

Central District Police Station Replacement. Built in 1972 and located under a public parking facility on Vallejo Avenue, this station is the only one not upgraded in the 1987 police facility bond program. This project will be further informed by the update to 2013 District Station Facility Evaluation and Standards Study.

Tenderloin Police Station Replacement. The current station constructed from an old auto shop garage is inadequate for current operations. This project will be further informed by the update to 2013 District Station Facility Evaluation and Standards Study.

Long-Term Evidence Storage Relocation. The Police Department is requesting a new location for its long-term evidence between three locations. Two of these locations, the Hall of Justice and the Crime Lab at Building 606 at the Hunter's Point Shipyard, are scheduled to move.

Criminal Courts at HOJ Relocation. The courts have the same overcrowding and seismic concerns at this building as the City. The City and the Superior Court have worked closely together since the HOJ was built to securely transport inmates from the City's jail to courtrooms. It is in the City's interest to enable the Superior Court to rebuild their Criminal Courts immediately adjacent to the existing and planned HOJ jails. The City is exploring dedicating a parcel of the existing site to the courts, which will be possible upon the demolition of the west wing of the HOJ.

County Jail #6 Low Security Detention Facility Decommissioning and Facility Repurpose. The Sheriff's Department is requesting the conversion of its low security facility and Learning Center at its San Bruno campus into a training facility that can meet several different purposes. This project will be informed by the Department's Comprehensive Facility Assessment.

Sheriff's Department Alternative Programs. The Sheriff is exploring the expansion of the Women's Reentry Center to accommodate more prison alternative programming and office space. The project will be informed by the Department's Comprehensive Facility Assessment.

Log Cabin Ranch Improvements and Master Plan Implementation. Upon completion of the Juvenile Probation Facility Master Plan, the City will need to make a decision on replacing these facilities that were constructed half a century ago.

Log Cabin Water and Waste Water Systems Replacement. Upon completion of the Juvenile Probation Facility Master Plan, the City will need to determine the benefits and costs of the replacement of these outdated systems.



Women's Reentry Center

Public Safety

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	10,355	10,873	11,416	11,987	12,586	72,018	129,235	176,690
SPENDING PLAN								
State of good repair renewal - Proposed Uses	2,790	2,792	3,468	4,046	4,559	30,402	48,045	
ADA Improvements	-	1,600	-	-	-	-	1,600	-
Enhancements	545,500	-	264,000	59,300	20,000	671,900	1,560,700	155,020
TOTAL	548,290	4,382	267,468	63,346	24,559	702,302	1,610,346	155,020
REVENUES								
General Fund	2,790	4,382	3,468	4,046	4,559	30,402	49,648	
Earthquake Safety & Emergency Response Bond 2010	25,000	-	-	-	-	-	25,000	
Earthquake Safety & Emergency Response Bond 2014	410,000	-	-	-	-	-	410,000	
Earthquake Safety & Emergency Response Bond 2020	-	-	-	-	-	290,000	290,000	
Public Health Facilities Bond	89,000	-	-	-	-	-	89,000	
Certificates of Participation	21,500	-	264,000	59,300	-	381,900	726,700	
Developer Funded	-	-	-	-	20,000	-	20,000	
TOTAL	548,290	4,382	267,468	63,346	24,559	702,302	1,610,346	
<i>Total San Francisco Jobs/Year</i>	<i>4,584</i>	<i>37</i>	<i>2,236</i>	<i>530</i>	<i>205</i>	<i>5,871</i>	<i>13,463</i>	

Departmental Breakdown **Fire Department**

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	4,201	4,411	4,632	4,863	5,107	29,628	52,842	89,881
SPENDING PLAN								
State of good repair renewal - Proposed Uses	776	774	965	1,126	1,269	8,459	13,369	-
Auxiliary Water Supply System Improvements	65,000	-	-	-	-	110,000	175,000	-
SFFD Ambulance Deployment Center Relocation	40,000	-	-	-	-	-	40,000	-
SFFD Neighborhood Stations and Critical Facilities Improvements	110,000	-	-	-	-	100,000	210,000	-
Treasure Island Neighborhood Fire House Replacement	-	-	-	-	20,000	-	20,000	-
SFFD Training Facility Relocation and Expansion	-	-	-	-	-	-	-	131,498
TOTAL	215,776	774	965	1,126	21,269	218,459	455,369	131,498

REVENUES

General Fund	776	774	965	1,126	1,269	8,459	13,369	-
Earthquake Safety & Emergency Response Bond 2010	25,000	-	-	-	-	-	25,000	-
Earthquake Safety & Emergency Response Bond 2014	150,000	-	-	-	-	-	150,000	-
Earthquake Safety & Emergency Response Bond 2020	-	-	-	-	-	210,000	210,000	-
Public Health Facilities Bond	40,000	-	-	-	-	-	40,000	-
Developer Funded	-	-	-	-	20,000	-	20,000	-
TOTAL	215,776	774	965	1,126	21,269	218,459	455,369	-
Total San Francisco Jobs/Year	1,804	6	8	9	178	1,826	3,832	-

Police Department

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	1,141	1,188	1,257	1,320	1,388	8,043	14,345	1,883

SPENDING PLAN

State of good repair renewal - Proposed Uses	280	279	348	406	458	3,052	4,824	
Police Stations Seismic Improvements & Renewals	30,000	-	-	-	-	80,000	110,000	-
SFPD Investigations - Relocation from HOJ	-	-	-	-	-	86,400	86,400	-
SFPD Traffic Company & Forensic Services Facility	165,000	-	-	-	-	-	165,000	-
TOTAL	195,280	279	348	406	458	169,452	366,224	-

DEFERRED

REVENUES

General Fund	280	279	348	406	458	3,052	4,824	
Earthquake Safety & Emergency Response Bond 2014	195,000	-	-	-	-	-	195,000	
Earthquake Safety & Emergency Response Bond 2020	-	-	-	-	-	80,000	80,000	
Certificates of Participation	-	-	-	-	-	86,400	86,400	
TOTAL	195,280	279	348	406	458	169,452	366,224	
Total San Francisco Jobs/Year	1,633	2	3	3	4	1,417	3,062	

Sheriff's Department

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	4,305	4,520	4,746	4,984	5,233	30,390	54,147	40,221

SPENDING PLAN

State of good repair renewal - Proposed Uses	1,391	1,387	1,729	2,017	2,273	15,156	23,553	
SHF Rehabilitation and Detention Facility	14,000	-	264,000	-	-	-	278,000	-
Sheriff's Dept Alternate Programs Facility	-	-	-	-	-	-	-	17,747
CJWS Low Security Detention Facility Decommissioning and Facility Repurpose	-	-	-	-	-	-	-	5,775
TOTAL	15,391	1,387	265,729	2,017	2,273	15,156	301,553	23,522

DEFERRED

REVENUES

General Fund	1,391	1,387	1,729	2,017	2,273	15,156	23,553	
Certificates of Participation	14,000	-	264,000	-	-	-	278,000	
TOTAL	15,391	1,387	265,729	2,017	2,273	15,156	301,553	
Total San Francisco Jobs/Year	129	12	2,221	17	19	127	2,524	

General Services Agency

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN								
Animal Care and Control Facility Renovation & Seismic Retrofit	49,000	-	-	-	-	-	49,000	-
Adult Probation - Relocation from HOJ	-	-	-	59,300	-	-	59,300	-
District Attorney - Relocation from HOJ	-	-	-	-	-	-	-	-
HOJ Land Purchase, Demolition, and Enclosure	7,500	-	-	-	-	140,600	140,600	-
Office of Chief Medical Examiner (OCME) Facility	65,000	-	-	-	-	48,300	55,800	-
TOTAL	121,500	-	-	59,300	-	-	65,000	-
							188,900	369,700
REVENUES								
Public Health Facilities Bond	49,000	-	-	-	-	-	49,000	-
Earthquake Safety & Emergency Response Bond 2014	65,000	-	-	-	-	-	65,000	-
Certificates of Participation	7,500	-	-	59,300	-	-	188,900	255,700
TOTAL	121,500	-	-	59,300	-	-	188,900	369,700
Total San Francisco Jobs/Year	1,016	-	-	496	-	1,579	3,081	-

Juvenile Probation

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	708	744	781	820	861	3,987	7,900	44,704

SPENDING PLAN

State of good repair renewal - Proposed Uses	343	342	426	497	560	3,735	5,902	-
ADA - Juvenile Probation Admin Building	-	1,600	-	-	-	-	1,600	-
JUV Administrative Building Replacement	-	-	-	-	-	106,600	106,600	-
TOTAL	343	1,942	426	497	560	110,335	114,102	-

REVENUES

General Fund	343	1,942	426	497	560	3,735	7,502	-
Certificates of Participation	-	-	-	-	-	106,600	106,600	-
TOTAL	343	1,942	426	497	560	110,335	114,102	-
Total San Francisco Jobs/Year	3	16	4	4	5	922	954	-

Police Department

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	1,141	1,198	1,257	1,320	1,386	8,043	14,345	1,683

SPENDING PLAN

State of good repair renewal - Proposed Uses	280	279	348	406	458	3,052	4,824	
Police Stations Seismic Improvements & Renewals	30,000	-	-	-	-	80,000	110,000	-
SFPD Investigations - Relocation from HOJ	-	-	-	-	-	86,400	86,400	-
SFPD Traffic Company & Forensic Services Facility	165,000	-	-	-	-	-	165,000	-
TOTAL	195,280	279	348	406	458	169,452	366,224	-

REVENUES

General Fund	280	279	348	406	458	3,052	4,824	
Earthquake Safety & Emergency Response Bond 2014	195,000	-	-	-	-	-	195,000	
Earthquake Safety & Emergency Response Bond 2020	-	-	-	-	-	80,000	80,000	
Certificates of Participation	-	-	-	-	-	86,400	86,400	
TOTAL	195,280	279	348	406	458	169,452	366,224	
Total San Francisco Jobs/Year	1,633	2	3	3	4	1,417	3,062	

Sheriff's Department

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	4,305	4,520	4,746	4,984	5,233	30,360	54,147	40,221

SPENDING PLAN

State of good repair renewal - Proposed Uses	1,391	1,387	1,729	2,017	2,273	15,156	23,953	
SHF Rehabilitation and Detention Facility	14,000	-	264,000	-	-	-	278,000	-
Sheriff's Dept Alternate Programs Facility	-	-	-	-	-	-	-	17,747
CJ#6 Low Security Detention Facility Decommissioning and Facility Repurpose	-	-	-	-	-	-	-	5,775
TOTAL	15,391	1,387	265,729	2,017	2,273	15,156	301,953	23,522

REVENUES

General Fund	1,391	1,387	1,729	2,017	2,273	15,156	23,953	
Certificates of Participation	14,000	-	264,000	-	-	-	278,000	
TOTAL	15,391	1,387	265,729	2,017	2,273	15,156	301,953	
Total San Francisco Jobs/Year	129	12	2,221	17	19	127	2,524	

General Services Agency

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN								
Animal Care and Control Facility Renovation & Seismic Retrofit	49,000	-	-	-	-	-	-	49,000
Adult Probation - Relocation from HOJ	-	-	-	59,300	-	-	-	59,300
District Attorney - Relocation from HOJ	-	-	-	-	-	140,600	-	140,600
HOJ Land Purchase, Demolition, and Enclosure	7,500	-	-	-	-	48,300	-	55,800
Office of Chief Medical Examiner (OCME) Facility	65,000	-	-	-	-	-	-	65,000
TOTAL	121,500	-	-	59,300	-	188,900	-	369,700
REVENUES								
Public Health Facilities Bond	49,000	-	-	-	-	-	-	49,000
Earthquake Safety & Emergency Response Bond 2014	65,000	-	-	-	-	-	-	65,000
Certificates of Participation	7,500	-	-	59,300	-	188,900	-	255,700
TOTAL	121,500	-	-	59,300	-	188,900	-	369,700
Total San Francisco Jobs/Year	1,016	-	-	496	-	1,579	-	3,091
Juvenile Probation								
Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	708	744	781	820	861	3,987	7,900	44,704
SPENDING PLAN								
State of good repair renewal - Proposed Uses	343	342	426	497	560	3,735	5,922	-
ADA - Juvenile Probation Admin Building	-	1,600	-	-	-	-	-	1,600
JUV Administrative Building Replacement	-	-	-	-	-	106,600	-	106,600
TOTAL	343	1,942	426	497	560	110,335	114,102	-
REVENUES								
General Fund	343	1,942	426	497	560	3,735	7,502	-
Certificates of Participation	-	-	-	-	-	106,600	-	106,600
TOTAL	343	1,942	426	497	560	110,335	114,102	-
Total San Francisco Jobs/Year	3	16	4	4	5	922	-	954

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IV | Health and Human Services

Health and Human Services

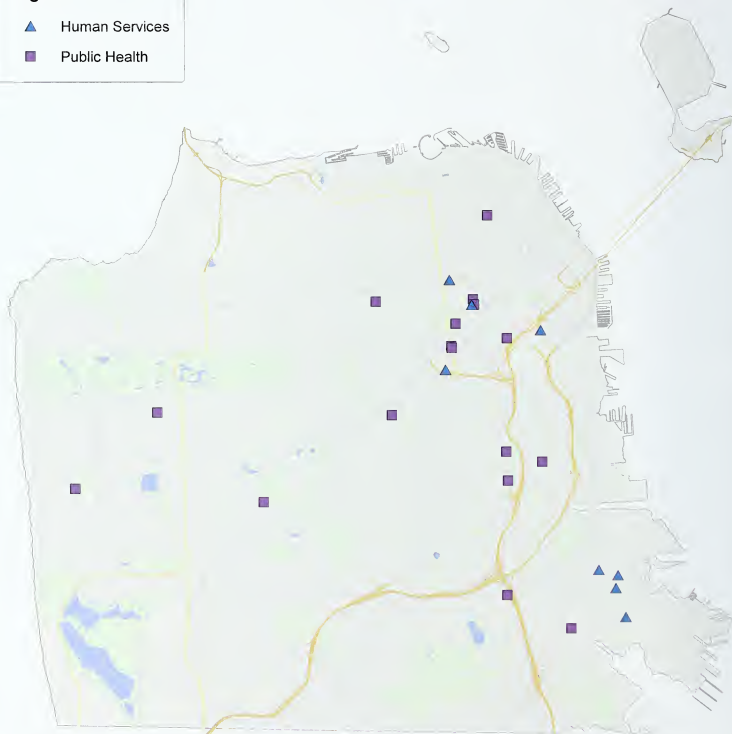
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Health and Human Services Facilities

Legend

- ▲ Human Services
- Public Health



Health and Human Services Facilities

The table below shows the facilities operated and maintained by the Department of Public Health (DPH) and the Human Services Agency (HSA), which provide direct public health and safety net services to city residents.

Central Admin Office, AITC Immunization & Travel Clinic
Ambulatory Care Admin Offices, Senior Clinic
Population Health Administrative Offices
Laguna Honda Hospital and Rehabilitation Center
San Francisco General Hospital Campus
Community Health Network Headquarters
Castro Mission Health Center
Maxine Hall Health Center
Silver Avenue Family Health Center
Chinatown Public Health Center
Ocean Park Health Center
Potrero Hill Health Center
Southeast Health Center
Curry Senior Center
Tom Waddell Urban Health
Sunset Mental Health Services
San Francisco City Clinic
Sojourner Truth Child Care Center
FACES SF Child care Center & Earl P. Mills Auditorium
Next Door Shelter
Former Caheed Childcare Center
Human Services Agency Headquarters
MLK Child Care Center
Hamilton Family Homeless Shelter
Multiservice Center South

The Department of Public Health (DPH) and the Human Services Agency (HSA) operate a broad range of facilities that provide direct public health and social services to city residents. DPH manages two major medical campuses – San Francisco General Hospital (SFGH) and Laguna Honda Hospital (LHH) – which together house 29 facilities. Additionally, DPH operates ten city-owned primary care health clinics. HSA manages eight facilities: three homeless shelters, three children's resource centers, and two administrative buildings. Both departments also provide programs at a number of leased properties where the City is responsible for maintenance and repairs.

Highlights and Accomplishments



SFGH Trauma One - patient floor

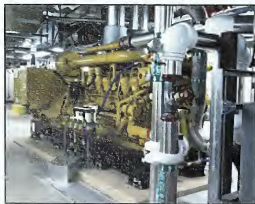
The Plan invests \$732 million in DPH and HSA facilities over the next ten years. Many of the facilities occupied by DPH and HSA are aging and in need of significant upgrades. Furthermore, an ever-changing regulatory and policy landscape demands continual review of the functions and uses of each facility. The impact of the Patient Protection and Affordable Care Act on DPH and HSA is still developing, as they are one of many service providers along with the private sector. DPH and HSA have been preparing plans to meet the needs of increased service demands, but this Plan recognizes that the extent of the capital need is still emerging.

Ensuring that health and human services are available after a major earthquake continues to be a top priority. Following the recent opening of Laguna Honda Hospital in 2010, the City is fulfilling its promise to complete construction of the new Acute Care Hospital at the SFGH

campus. The new building will replace the acute care functions currently located in SFGH Building 5. The \$887.4 million project funded by a 2008 G.O. bond is on-budget. It is 85 percent complete as of November 2014, and is scheduled to open in late 2015. Significant progress has been made over the past year with interior finishes and the complete exterior building envelope. All bonds have been sold over four sales, the last of which occurred in January 2014 in the amount of \$209.9 million.

Additional accomplishments since the FY 2014-2023 Capital Plan include the following:

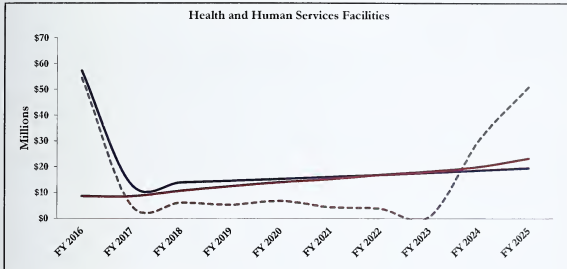
- ADA Improvements. The final projects enumerated by the City's ADA Transition Plan will be completed by FY 2015, including: modernization of elevators and SFGH Building 80/90; disability access at public entries and bathrooms around SFGH campus; SF City Clinic disability access; Maxine Hall Clinic elevator; and renewal of accessibility features and HSA's homeless shelters.
- DPH updated the 2009 SFGH Institutional Master Plan (IMP), which was reviewed and approved by the Health Commission in September 2014. The IMP provides a roadmap for space planning decisions and a framework for determining funding needs for future major capital projects once the new Acute Care Hospital is complete. The updated plan includes five phases that are projected to be complete by 2022.
- Formed a taskforce with the University of California, San Francisco in 2013, to make short-term seismic mitigation measures to several buildings on the SFGH campus, develop plans for a new UCSF research facility on the B/C parking lot adjacent to the existing main hospital, and coordinate DPH improvements to buildings that house both DPH and UCSF staff. UCSF conducted site soil samplings in November 2014 as part of their due diligence.



- Generators have been installed at SFGH as part of the \$24 million SFGH Emergency Generator Replacement project, and campus emergency power is now being provided by a code compliant generator plant. Required boiler work is currently in the final commissioning phase, with project close-out expected in first quarter of 2015. Replacing the 24-hour steam generators with on-demand diesel results in significant savings in operating costs per year.
- Major elevator repairs and accessibility upgrades at SFGH Buildings 5 and 80/90 are in construction. Elevator modernizations for 13 elevators in Building 5,

and 3 elevators in Building 80/90, will be complete by June 2015. Accessibility upgrades in Building 5 restrooms and showers, started construction in FY 2015. In addition, design work has progressed on the Maxine Hall Health Center, which will include a new elevator installation and examination rooms on the second floor to address enrollment increases in the Western Addition Neighborhood.

- Programming work has begun on the Castro/Mission Health Center which will be reconfigured with additional examination rooms and support functions to provide increased services.
- HSA remodeled the lobbies at 170 Otis St., 1235 Mission St., and 1440 Harrison St., to support the increase in clients as a result of the Federal Patient Protection and Affordable Care Act, and to coordinate facility layout with changing business practices.



1. Renewal Program

The Plan projects \$224 million in renewal needs over the next ten years to keep existing public health and human services facilities in a state of good repair. Given funding constraints, the Plan allocates \$148 million towards these needs.

2. Enhancement Program (FY2016 – FY2020)

Enhancements for health and human services facilities in the first five years of the Plan are highlighted below.

SFGH Rebuild. This critical project is on schedule (85 percent complete as of November 2014) and budget and expected to open in December 2015. The new seismically-safe facility allows SFGH to continue operating the only Level I Trauma Center in San Francisco, and includes additional improvements such as upgrading the electrical systems, upgrading the loading dock and freight elevator, and replacing the roof. The final bond issuance was sold for \$209.9 million in January 2014.

Public Health and Safety Bond Program. The Plan recommends a \$311 million Public Health and Safety Bond for the June 2016 ballot. Two of the projects funded by this bond are described below. The other projects are described in the Public Safety Chapter.

- **SFGH Hospital (Building 5) Seismic Retrofit and Renovation.** With the new acute care hospital projected to be complete in 2015, the SFGH Campus Master Plan proposes moving various department functions from the seismically deficient red brick buildings to Building 5. The renovation work will primarily be fire and life safety improvements, architectural



SFGH Building 5

work to accommodate outpatient services and other clinic, and structural improvements to the exterior columns. The total project cost is estimated at \$190 million, and will be funded by the June 2016 G.O. Bond.

- **New Southeast Health Center Facility.** This project will be implemented in two phases, the first of which will be a renovation of the existing facility to provide more efficient work and patient flow, including additional examination rooms and other support functions. The second phase will be a new addition that expands and integrates family-oriented primary care and behavioral health services, co-located alongside core ancillary services such as urgent care, radiology, laboratory, and pharmacy services. Behavioral health programming including Children, Youth & Families programs and services, will be relocated here from leased space. The project is estimated to cost \$33 million, with \$3 million from a Mental Health Services Act grant, and \$30 million from the June 2016 G.O. Bond.



Rendering of New South East Health Center

DPH Administration Building Relocation. Built in 1932, 101 Grove currently houses DPH administration headquarters, the Tom Waddell Health Center, an immunization clinic, and the Public Health Laboratory which serves the City's Primary Care Clinics. A recent study revealed significant seismic deficiencies at this facility, leading to the decision to relocate all DPH functions currently housed at 101 Grove. The Health Center and clinic would stay in the Civic Center area and the Department of Real Estate is currently exploring lease options. Relocating the remaining functions is estimated to cost \$59.5 million, and will be funded by Certificates of Participation in FY 2019.

ADA Improvements. ADA improvements are needed at SFGH Building 3, Service Building, and Building 9, including sidewalk and ramp work, and accessibility improvements to the restrooms at Carr Auditorium. The estimated cost is \$1.5 million, and will be funded by the General Fund.

3. Enhancement Program (FY2021 – FY2025)

The major seismic projects at DPH facilities will continue construction and are expected to be completed within the second five years of the Plan.

Public Health Bond. The Plan recommends a \$300 million Public Health Bond in FY 2022. Proposed projects funded by this bond are described below.

- **SFGH Building 80/90 Seismic Retrofit and Renovation.** Constructed in 1934, Building 80/90 is a seismically deficient red brick building that houses the urgent care clinic and several other clinics. These clinics will move to Building 5 to make room for a major seismic renovation of this structure. The total project cost is estimated to be \$141 million.
- **Public Health Facilities Improvements.** The remaining \$159 million from the FY 2022 G.O. Bond will be programmed in future iterations of the Capital Plan, and will be used to address various critical issues, including life-safety, seismic, and renewal needs.

4. Deferred Projects

The Plan defers the following investments for health and human services facilities.

SFGH Building 2 Cooling Towers Replacement. The existing system is over 30 years old and a recent study by an engineering firm (NAM) established the need for replacement. The estimated cost is \$6.4 million.

LHH Facility Master Plan. Developing a master plan of LHH capital needs to coordinate the campus with the programmatic and capital changes at SFGH is estimated to cost \$750,000.

LHH Patient Ward Remodel. Converting the old patient wards into office space for administrative functions is estimated to cost \$3.5 million.

LHH Wing (K, L, M, O) Reuse Program. Tenant improvements and related upgrades to wings K, L, M, O of the Administrative Building in support of the reuse of the facility from patient care to office space is estimated to cost \$5.8 million.

LHH C-Wing Remodel Floors 2 – 5. Renovation of wing C, in order to accommodate staff from other departments on campus. Work includes ADA upgrades, IT infrastructure, and entryway construction, and is estimated to cost \$3.5 million.

LHH New Parking Lot. Installation of a new parking lot to accommodate the increased need from converting the old patient wards into office space is estimated to cost \$1.5 million.

LHH Voluntary Seismic Improvements. Voluntary improvements of the lateral force-resisting system at the old LHH buildings are estimated to cost \$1.4 million.

LHH IT Fiber Distribution. Providing fiber connectivity down the wings of the old LHH buildings is estimated to cost \$2.3 million.

DPH Clinic Patient Enhancement Program. Providing new painting, finishes, and enhancements to 29 community health services clinic waiting areas and exteriors in advance of the health care reform measures that begin in 2014 is estimated to cost \$2 million. DPH continues to explore alternative funding.

5. Emerging Needs

The level of capital investment required to meet the following emerging needs is not funded in the Plan but will be reviewed in the subsequent years as additional planning is conducted and uncertainty around project-specific issues is resolved.

Remaining SFGH Campus Seismic Upgrades. The SFGH Campus Master Plan outlines the series of necessary campus-wide relocations and renovations, which include the seismic upgrades of Buildings 1, 9, 10, 20, 30, 40, and 100. DPH is developing cost estimates for the projects. No funding source has been identified, but DPH is exploring the opportunity for developer-led bio-medical interests in these buildings as an alternative means of funding.

SFGH Building 5 Kitchen. This kitchen was last updated in 1982, and there is flooring, ceiling, and electrical work required throughout. In addition, food storage areas require renovation and upgrade. This is an OSHPD project, and needs further study to develop cost estimates.

SFGH Building 2 Seismic Upgrade. Building 2 provides utilities to acute care services, but does not currently meet all the seismic performance requirements needed to serve acute care services. A seismic upgrade to Non-structural Performance Criteria level 4 (NPC-4) is required.

LHH Elevator Modernization. This is an emerging need, as DPH is exploring the potential to reuse some of the existing wings for administrative and health support programs. There are a total of nine elevators in need of modernization. The intent of the program will be to phase the modernization projects over a 2-3 year period.

LHH Computer Server Room Fire Suppression System Installation. The current wet sprinkler system needs to be replaced with a dry sprinkler system compatible for use in a computer server room.

DPH Health Centers Security Improvements. DPH has recently hired a department-wide Security Manager who will survey DPH assets for necessary security improvements such as



Ocean Park Health Center

security cameras, IT improvements, and monitoring capabilities.

Medical Respite Expansion. At the request of the SF Board of Supervisors, DPH is planning for a 30-40 Bed congregate medical shelter at 101-8th Street/1185 Mission Street. The facility will need to be renovated and will provide for clients who are medically frail and need help with health management, medication adherence, and social services.

DPH Clinic Expansion. This project has focused efforts on Maxine Hall & Castro/Mission Health Clinics. While the Maxine Hall project is almost complete in design, the Castro/Mission project is still in programming. In addition, the Ocean Park Health Clinic will require expansion as well. These projects will provide increased service levels to meet growing demand, in order to meet current demand resulting from health care reform.

170 Otis Seismic Upgrade. Built in 1978, 170 Otis houses HSA's executive offices and program administration. The seismic upgrade, which would impact the basement and the ground floor only, is estimated to cost \$3.3 million, but no funding source has been identified.

HSA Space Reconfiguration. HSA recently completed a space inventory to examine its existing and future space usage and staffing levels for the purposes of maximizing efficiency of space use, streamlining and consolidating operations. Future plans will include more details regarding recommended capital investments.



Human Services Agency on 170 Otis

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Rendering of Alice Griffith Block 2

Overview and Highlights

The City's affordable housing assets and initiatives are managed by the San Francisco Housing Authority, the Office of Community Investment and Infrastructure and the Mayor's Office of Housing and Community Development.

The San Francisco Housing Authority (SFHA) is responsible for providing and maintaining housing for very low-income families, senior citizens and persons with disabilities. SFHA's current portfolio includes 46 sites with more than 6,500 units. Nearly all of SFHA's funding is from the U.S. Department of Housing and Urban Development (HUD), and rents paid by residents. Residents pay approximately 30 percent of their incomes for rent.

Mayor's Office of Housing and Community Development (MOHCD) has a twofold mission: to coordinate the City's housing policy and provide financing for the development, rehabilitation, and purchase of affordable housing in San Francisco; and to strengthen the social, physical, and economic infrastructure of San Francisco's low-income neighborhoods and communities in need.

MOHCD administers a variety of financing programs to enable the development and preservation of affordable housing, to assist low-income homeowners, and to help San Franciscans become first-time homebuyers. In addition, MOHCD administers community development programs that ensure the economic self-sufficiency of low-income San Francisco individuals and families; stabilize housing through eviction prevention, foreclosure counseling and access to housing programs; support homeless and emergency shelter programs; provide funds for community facilities rehabilitation; and offer targeted community-based organization technical assistance programs. MOHCD is also responsible for monitoring and ensuring the long-term affordability and physical viability of the City's affordable housing stock.

Additionally, MOHCD, as Successor Housing Agency, is now responsible for all former San Francisco Redevelopment Agency (SFRA) housing assets and functions, which include approximately 11,000 units of affordable housing. The housing supported by the former SFRA is also owned and managed by non-profit and for-profit entities; however the SFRA retained ownership of the underlying land, entering into long-term (99 year) leases with the development entities.

MOHCD's portfolio of affordable housing now includes more than 22,000 units for seniors, families, formerly homeless, and people with disabilities. The affordable housing that MOHCD supports is developed, owned and managed by private non-profit and for-profit entities that leverage City subsidies with state and federal resources to create permanent affordable housing opportunities for low income households.

The MOHCD is also responsible for managing the Housing Trust Fund (HTF). Approved by San Francisco voters in 2012, the HTF will provide consistent funding over 30 years to create new affordable housing and preserve existing affordable housing assets, as well as support a number of programs including the Complete Neighborhoods Infrastructure Grant Program which provides grants for the construction of neighborhood amenities such as streetscape improvements and pocket parks in areas of the City that are zoned for growth but lack sufficient supporting infrastructure.

1. Enhancement Program

Conversion of Public Housing under HUD Rental Assistance Demonstration Program

In 2012, the City and County of San Francisco and the SFHA staff, along with representatives of 72 different community organizations, met over a four-month period to develop recommendations as part of the re-envisioning plan for the SFHA (the “Plan”). One of the Plan’s primary goals is addressing the \$270 million backlog of deferred maintenance needs in the City’s public housing stock.

To implement the recommendations of the Plan, SFHA and City staffs, including the Mayor’s Office, the Mayor’s Office of Housing and Community Development, the City Administrator, and the SFHA’s Acting Executive Director, developed a financing and rehabilitation strategy. While addressing critical immediate and long-term rehabilitation needs, the proposed strategy will, importantly, preserve affordability and enhance housing habitability for very low-income residents.

The first step in SFHA’s re-envisioning effort is the conversion of the majority of its public housing units to private non-profit led ownership under HUD’s Rental Assistance Demonstration Program (RAD). RAD offers the opportunity for SFHA to preserve its housing units as affordable housing for the long-term, and to rehabilitate and recapitalize projects in a manner that will maintain the physical and economic viability of the developments for at least 20 years.

The conversion program will be funded through HUD’s RAD Program as well as a combination of other sources including but not limited to: HUD rental subsidies; MOHCD funding; low-income housing tax credits; tax-exempt bond financing through the California Debt Limit Allocation Committee; long-term ground leases from SFHA; and seller carry-back financing.

MOHCD anticipates that 4,584 housing units in 41 SFHA’s projects will be converted in two phases within the next ten years. Phase I is expected to begin October 2015, while Phase II will likely start mid 2017. Phase I and Phase II projects are listed in the table below:

SFHA Sites	Existing Units	Phase I Unit Conversion	Phase II Unit Conversion	Total
966 Alemany/Holly Cts	276	118	158	276
969 Westside Courts	136	0	136	136
970 Westbrook	226	0	226	226
971 Ping Yuen/Bay	285	51	234	285
973 Hunters Point	213	213	0	213
976 Ping Yuen N/990 Pacific	292	92	200	292
977 Pine/Bush	221	113	108	221
978 Rosa Parks	206	0	198	198
979 Woodside	110	110	0	110
980 Mission Dolores	114	0	92	92

982 Lundy/18th St	109	0	107	107
981 350/666 Ellis	196	100	96	196
983 Clementina	276	0	276	276
984 California/JFK	138	0	138	138
985 Randolph/McAllister/etc	137	0	97	97
986 Sanchez/31st/Arguello	276	276	0	276
987 Turk/939/951 Eddy	149	149	0	149
988 Robert B. Pitts	203	203	0	203
Subtotal	4,957	1,425	2,066	3,491

HOPE SF Projects				
974 Hunters View 2	119	54	39	93
975 Alice Griffith	256	0	190	190
989 Hunters View 1	54	54	0	54
Subtotal	429	108	229	337

HOPE VI Projects	Existing Units	Phase I Unit Conversion	Phase II Unit Conversion	Total
960 Hayes Valley North	51	51	0	51
961 Hayes Valley South	66	66	0	66
962 Bernal Dwellings	160	160	0	160
963 Plaza East	193	193	0	193
990 North Beach	138	138	0	138
991 Valencia Gardens	148	0	148	148
Subtotal	756	608	148	756
Grand Total	6,142	2,141	2,443	4,584

HOPE SF

MOHCD is the lead implementing agency for HOPE SF - an anti-poverty and housing development initiative that requires the complete demolition and rebuilding of some of the City's most distressed public housing sites. This initiative is a broad-based, public-private partnership lead by the Mayor's Office that unites an array of stakeholders to engage with residents and provide resources that can interrupt the cycle of poverty for some of the most isolated and neglected communities within the City.

The HOPE SF active public housing sites are:

- Hunters View
- Alice Griffith
- Potrero Terrace and Annex
- Sunnydale-Velasco

Through intensive community and economic development, combined with comprehensive resident service supports, HOPE SF seeks to reintegrate these long-isolated public housing communities with the City and to connect HOPE

SF families with all the opportunities the City has to offer. The program is carried out by MOHCD, in coordination with the Office of Community Investment and Infrastructure (OCII).

HOPE SF calls for a wide variety of capital improvements that will



SFFHA Housing Sites

begin with horizontal infrastructure improvements that prepare the way for vertical new homes. Major program improvements include:

- Constructing new streets and improving public right-of-way infrastructure Replacing dilapidated public housing with newly constructed units while adding new affordable rental and market rate homes, as well as retail and commercial space; and
- Investing in new community facilities and open space such as community centers, vcommunity gardens, parks and playgrounds.

Currently, there are four active HOPE SF sites, representing 5,255 units of new housing when fully built-out. The table below provides an overview of the four active sites. Each site will be constructed in phases over a period of up to 20 years.

Of the four active sites, Hunters View and Alice Griffith represent HOPE SF's first two projects. Hunters View has completed phase I and is nearing the start of phase II construction. Alice Griffith is nearing start of construction for phase I and II.

The following table provides an overview of the current status of the HOPE SF projects.



Name and Location	Unit totals	Vertical Infrastructure Cost Estimates	Horizontal Infrastructure Cost Estimates	Status
Hunters View, Bayview (22 Acres)	<ul style="list-style-type: none"> • Public Housing: 267 • Affordable Rental: 86 • Market Rate: 392 • BMR Homeowner: 22 • TOTAL UNITS: 745 	\$248,549,352 (Affordable and Replacement Units)	\$30,929,473 (Based upon costs to dates and contractor cost estimates)	<ul style="list-style-type: none"> • Construction of Phase I infrastructure and vertical completed Spring of 2013. • Phase II to begin Winter of 2014. Anticipated completion: 2018
Alice Griffith, Hunter's Point Shipyard/Candlestick Point (27.5 Acres)	<ul style="list-style-type: none"> • Public Housing: 256 • Affordable Rental: 248 • Market Rate: 600 • BMR Homeowner: 106 • TOTAL UNITS: 1,210 	\$297,405,574 (Affordable and Replacement Units)	\$18,000,000 Included under Hunters Point Shipyard Community Benefits Agreement and installed by Lennar Urban	<ul style="list-style-type: none"> • Design of Phase I infrastructure and vertical underway. • Phase I and Phase II infrastructure underway. Construction to start on both phases in January 2015.
Potrero Annex and Terrace, Potrero Hill (38 Acres)	<ul style="list-style-type: none"> • Public Housing: 606 • Affordable Rental: 424 • Market Rate: 486 • BMR Homeowner: TBD • TOTAL UNITS: 1516 	\$511,385,000 (Affordable and Replacement Units)	\$89,900,000 (Based upon Developer's consultant estimates dated October 2014)	<ul style="list-style-type: none"> • Land use entitlements and environmental approvals to be completed summer of 2015. • Initiation of construction dependent on funding availability.
Sunnydale-Velasco, Visitation Valley (50 Acres)	<ul style="list-style-type: none"> • Public Housing: 785 • Affordable Rental: 307 • Market Rate: 645 • BMR Homeowner: TBD • TOTAL UNITS: 1651 	\$384,009,840 (Affordable and Replacement Units)	\$101,500,000 (Based upon Developer's consultant estimates dated July 2014)	<ul style="list-style-type: none"> • Land use entitlements and environmental approvals to be completed summer of 2015. • Initiation of construction dependent on funding availability.

Both sites are part of the Hunters Point/Candlestick Point Project Area and have successfully leveraged state and federal funds in addition to tax increment to attain sufficient financial viability to move the projects forward. Hunters View received a \$30 million state Infill

Infrastructure Grant for infrastructure development, and Alice Griffith was awarded a federal Choice Neighborhoods Initiative (CNI) grant from HUD, in the amount of \$30.5 million. Infrastructure and housing costs for Alice Griffith will primarily be funded through developer contributions and property tax financing as part of an ongoing financial obligation of the successor to the San Francisco Redevelopment Agency, the Office of Community Investment and Infrastructure (OCII).

Additional funding for HOPE SF will come in the form of Certificates of Participation issued by the City. In 2010, the Board of Supervisors authorized the issuance of Certificates of Participation financing to provide approximately \$25 million toward completion of the Hunters View housing development. That \$25 million of Certificates of Participation will be needed by Fiscal Year 2014-2015.



Hunters View 4 and Prospect Park

Commencement of HOPE SF's next phase of development, consisting of the remaining two sites, Potrero Annex and Terrace and Sunnydale-Velasco, is pending while MOHCD works to secure necessary funding for these projects. Neither site is part of a major project area (former redevelopment area) nor are there funds currently available at the state level to support infill infrastructure development. However, both sites have received a CNI Planning Grant from HUD to facilitate planning activities that will advantageously position them for future funding applications for the CNI Implementation Program. CNI Planning activities commenced in 2013 and were completed in October 2014.

Unfortunately, the Potrero and Sunnydale developments face greater challenges than the first two HOPE SF projects, Hunters View and Alice Griffith. Both Hunters View and Alice Griffith benefitted greatly from funding from the former San Francisco Redevelopment Agency and are the two smaller HOPE SF sites. Both combined are less than the size of Sunnydale alone. Also, given the current funding limitations Potrero and Sunnydale will require a longer time to raise and assemble funding to carry out the work of rebuilding. The poor condition of the buildings at Potrero and Sunnydale add urgency to the work of transforming these sites in order to improve living conditions for the existing residents.

HOPE SF Recent Accomplishments

HOPE SF Site	2014-2018	2019-2023	Funding Description
Hunters View	Complete Phase II and III infrastructure and vertical		Phase III infrastructure funding TBD
Alice Griffith	Complete Phase I-III infrastructure and vertical	Complete Phase IV-V infrastructure and vertical	Infrastructure funding to be provided by Lennar Corp
Sunnydale	Complete planning activities and initiate Phase I of infrastructure and vertical	Achieve 25% construction completion of all phases	Identification of funding for infrastructure improvements is critical for project advancement
Potrero	Complete planning activities and initiate Phase I of infrastructure and vertical	Achieve 50% construction completion of all phases	Identification of funding for infrastructure improvements is critical for project advancement

Hunters View – Phase IIa has been fully funded and all infrastructure for Phase II is now complete. Phase IIb (Block 10) will start construction in March 2015. Block 10 houses the primary community functions of Hunters View including community meeting facilities and a new childcare center.

Alice Griffith – Infrastructure work for Phase I and II is nearing completion for the projected start of construction in January 2015. Phase III is currently in schematic design and will begin construction in fall 2016.

Potrero – The EIR/EIS was published on November 7, 2014. Contingent upon environmental clearance and approval by the Planning Commission and Board of Supervisors, the project will be entitled in late summer 2015. The project also completed its Transformation Plan funded by the CNI Planning Grant.

Sunnydale – The EIR/EIS will be published in December 2014. Contingent upon environmental clearance and approval by the Planning Commission and Board of Supervisors, the project will be entitled in late summer 2015. The project also completed its Transformation Plan funded by the CNI Planning Grant.

Deferred Projects and Emerging Needs

- **Former SFRA and MOHCD Housing.** While the City is not responsible for management, maintenance or operations of former SFRA housing units, these assets do comprise a significant part of San Francisco's affordable housing infrastructure, ensuring access to housing for thousands of low and moderate income households. The long-term viability of this infrastructure, and the ability of the City to maintain a diverse population, will depend upon continued monitoring and potential investment by the Mayor's Office of Housing and Community Development. Much of the SFRA/MOHCD portfolio is funded by Low Income Housing Tax Credits, one of the few remaining robust national affordable housing funding sources. At the end of the tax credit compliance term, many developments will be restructured or seek refinancing. MOHCD is working to anticipate the future needs of the portfolio through rigorous compliance monitoring.

While the preservation of existing housing assets at MOHCD is a significant achievement, the loss of Redevelopment's tax increment financing dealt a serious blow to affordable housing production in the City. SFRA invested 50% of its annual tax increment in affordable housing production, at a value of approximately \$50 million each year. Concurrent declines in annual federal grant funding – HOME, HOPWA, and the Community Development Block Grant (CDBG) program – amplified this loss to San Francisco's affordable housing production and preservation resources. Even while the local economy has seen a dramatic recovery in the last two years, the \$50 million annual tax increment loss is still keenly felt



- **Former SFRA and MOHCD Housing.** As discussed in the above HOPE SF section, commencement of HOPE SF's next phase of development, consisting of the remaining two sites, Potrero Annex and Terrace and Sunnydale-Velasco, is pending while MOHCD works to secure necessary funding for these projects. Neither site is part of a major project area (former redevelopment area) nor are there funds currently available at the state level to support infill infrastructure development. However, both sites have received a CNI Planning Grant from HUD to facilitate planning activities that will advantageously position them for future funding applications for the CNI Implementation Program. CNI Planning activities commenced in 2013 and were completed in October 2014.

Health and Human Services

Program / Project

FY 2021 -

FY 2016

FY 2017

FY 2018

FY 2019

FY 2020

FY 2021 -

2025

Plan Total

Backlog

State of good repair renewal - Need

SPENDING PLAN

State of good repair renewal - Proposed Uses	13,810	13,732	12,341	14,109	15,677	101,623	171,291	
ADA Improvements	-	1,000	500	-	-	-	1,500	-
Enhancements	223,000	-	-	59,500	-	300,000	582,500	38,698
HOPE SF	99,644	141,152	109,135	-	95,720	585,496	1,031,147	-
TOTAL	336,454	155,884	121,975	73,609	111,397	987,119	1,768,438	38,698

DEFERRED

REVENUES

General Fund	8,613	9,587	11,204	12,489	14,073	93,838	149,803	
Public Health Facilities Bond	220,000	-	-	-	-	300,000	520,000	
Certificates of Participation	-	-	-	59,500	-	-	59,500	
Other Local Sources	21,743	70,457	55,750	-	52,200	325,895	526,046	
State	3,000	-	-	-	-	9,106	12,106	
Federal	8	8	8	8	8	22	61	
Private	77,901	35,142	53,385	-	43,520	291,014	500,982	
TOTAL	331,265	115,193	120,346	71,996	109,800	1,019,876	1,768,476	
Total San Francisco Jobs/Year	2,769	963	1,066	602	918	8,526	14,764	

Annual Surplus (Deficit)	(5,189)	(40,691)	(1,629)	(1,613)	(1,597)	32,757	(17,982)	
Cumulative Surplus (Deficit)	(5,189)	(45,880)	(47,509)	(49,122)	(50,719)	(17,962)		

Departmental Breakdown **Department of Public Health**

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	17,365	18,399	19,319	18,670	17,503	108,870	196,125	220,645
SPENDING PLAN								DEFERRED
State of good repair renewal - Proposed Uses	6,063	6,045	7,535	8,792	9,907	56,061	104,403	-
DPH Administration Building Relocation	-	-	-	59,500	-	-	59,500	-
SFGH Bldg 5 Renovation & Seismic Retrofit	190,000	-	-	-	-	-	190,000	-
SFGH Sidewalk and Ramp Work and Carr Auditorium Accessible Restrooms and Accessibility Remodel	-	1,000	500	-	-	-	1,500	-
Southeast Health Center Expansion and Behavioral Health Integration Project	33,000	-	-	-	-	-	33,000	-
SFGH Building 80/90 Renovation & Seismic Retrofit	-	-	-	-	-	141,000	141,000	-
Public Health Facilities Improvements	-	-	-	-	-	159,000	159,000	-
DPH Mission Health Center Reconfiguration	-	-	-	-	-	-	-	3,339
Castro Mission Health Center Reconfiguration	-	-	-	-	-	-	-	3,256
Laguna Honda Hospital New Parking Lot	-	-	-	-	-	-	-	2,443
Laguna Honda Hospital Voluntary Seismic Improvements	-	-	-	-	-	2,203	2,203	-
LHH C-Wing Remodel Floors 2-5	-	-	-	-	-	-	-	5,546
LHH Facility Master Plan	-	-	-	-	-	1,222	-	1,222
LHH IT Fiber Distribution	-	-	-	-	-	-	-	3,746
LHH Wing (K,L,M,O) Reuse Program	-	-	-	-	-	-	-	4,897
Ocean Park Health Center Exam Room Expansion	-	-	-	-	-	2,851	-	2,851
SFGH Bldg 2 Cooling Towers Replacement	-	-	-	-	-	-	-	10,425
TOTAL	229,063	7,045	8,035	66,292	9,907	366,061	688,403	39,920

REVENUES

General Fund	6,063	7,045	8,035	8,792	9,907	66,061	105,903	
Public Health Facilities Bond	220,000	-	-	-	-	300,000	520,000	
Certificates of Participation	-	-	-	59,500	-	-	59,500	
State	3,000	-	-	-	-	-	3,000	
TOTAL	229,063	7,045	8,035	68,292	9,907	366,061	688,403	
Total San Francisco Jobs/Year	1,915	59	67	571	63	3,060	5,755	

Human Services Agency

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	2,188	2,298	2,413	2,533	2,660	15,433	27,525	(17,169)

SPENDING PLAN

State of good repair renewal - Proposed Uses	2,550	2,542	3,168	3,697	4,166	27,777	43,899	
TOTAL	2,550	2,542	3,168	3,697	4,166	27,777	43,899	-

Total San Francisco Jobs/Year

REVENUES								DEFERRED
General Fund	2,550	2,542	3,168	3,697	4,166	27,777	43,899	
TOTAL	2,550	2,542	3,168	3,697	4,166	27,777	43,899	-

San Francisco Housing Authority

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	21,879	21,879	22,754	23,864	24,611	136,633	253,420	158,759

SPENDING PLAN

Current Backlog								DEFERRED
State of good repair renewal - Proposed Uses	5,197	5,145	1,637	1,621	1,604	7,785	22,989	357,336

HOPE SF

Hunters View - Vertical	41,463	-	-	-	-	-	-	
Hunters View - Infrastructure	-	-	-	-	-	-	-	
Alice Griffin - Vertical	58,181	59,213	-	-	-	-	-	
Sunnydale - Vertical	-	29,659	40,675	-	-	122,175	192,509	
Sunnydale - Infrastructure	-	8,000	-	-	19,000	30,500	57,500	
Potrero - Vertical	-	35,280	55,460	-	70,520	315,000	476,260	
Potrero - Infrastructure	-	9,000	13,000	-	6,200	55,700	83,900	
TOTAL	104,841	146,297	110,772	1,621	97,324	593,281	1,054,136	

REVENUES

Local	21,743	70,457	55,750	-	52,200	325,895	526,046	
State	-	-	-	-	-	-	-	
Private	77,901	35,142	53,385	-	43,520	291,014	500,962	
Federal	8	8	8	8	8	22	61	
TOTAL	99,652	105,606	109,142	8	96,728	625,038	1,036,174	

Total San Francisco Jobs/Year

Annual Surplus (Deficit)	(5,189)	(40,691)	(1,629)	(1,613)	(1,597)	32,757	(17,962)	
Cumulative Surplus (Deficit)	(5,189)	(45,880)	(47,509)	(49,122)	(50,719)	(17,962)		



V | Infrastructure and Streets

Streets and Rights-of-Way	
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The City and County of San Francisco is responsible for operating and maintaining a complex infrastructure network that supports the delivery of critical services to San Francisco residents, businesses and visitors. While the San Francisco Public Utilities Commission (SFPUC) primarily manages underground infrastructure, the Department of Public Works (DPW) focuses on above ground infrastructure such as roadways, sidewalks, landscaping and street structures.

The SFPUC is responsible for providing and distributing water to 2.4 million customers; wastewater treatment, effluent discharge, and biosolids disposal; and supplying electric power to operate Muni streetcars and electric buses, street and traffic lights, and municipal buildings. Under contractual agreement with 28 wholesale water agencies, the SFPUC also supplies water to customers in Alameda, Santa Clara and San Mateo counties.

The City maintains approximately 850 miles of streets and roadways comprising 12,458 street segments or blocks; 37 miles of roadway within the City's Park System; certain special streets such as the Embarcadero and Doyle Drive; sidewalks adjoining City, State and Federal properties; 340 street structures; and more than 34,000 street trees.

Streets and Rights-of-Way

Legend

— To be Paved 2015-2019

— Paved 2009-2014



Overview and Accomplishments

The City maintains approximately 865 miles of streets and roadways comprising 12,857 street segments or blocks; 37 miles of roadway within the City's Park System; certain special streets such as the Embarcadero; sidewalks adjoining City, State and Federal properties; more than 360 street structures; and approximately 15,000 street trees.

In November 2011, City voters passed the Road Resurfacing and Street Safety (RRSS) G.O. Bond allowing the City to issue up to \$248 million in bonds to fund critical street and right-of-way improvements. These improvements include: repaving streets; constructing curb ramps; repairing sidewalk; rehabilitating street structures; and implementing streetscape, pedestrian and bicycle safety features city-wide. The bond represented a major, one-time investment in street and right-of-way infrastructure.

Thanks in large part to the increased level of investment made possible with the RRSS G.O. Bond, San Francisco made many capital renewals and enhancements in the right of way. Since the last Capital Plan, the City:

- Repaved and maintained 1,000 blocks. This has raised the City's average pavement condition index score to 66, reversing over a decade of decline;
- Constructed approximately 2,000 curb ramps through stand-alone projects and with repaving projects;
- Inspected the sidewalk condition of 300 blocks and repaired more than 370,000 square feet of sidewalks;
- Inspected nearly 300 structures, and repaired 24 street structures including stairs, retaining walls, and guardrails; and
- Completed ten streetscape improvement projects (Great Highway Streetscape, Jefferson Streetscape, Balboa Streetscape, Cesar Chavez Streetscape, Point Lobos Streetscape, Polk-Contra Flow, Folsom Streetscape, Broadway Phase III Streetscape, Marina Green Bike Trail, and 19th Avenue Median Improvements). Twenty-nine additional streetscape projects are currently in the planning, design, bid and award, construction, or closeout phase.



DPW Street Resurfacing Crew

The City has been able to make significant improvements when combining RRSS G.O. Bond funds with existing revenue sources for streets and right of way. Approximately 17% or \$42 million of the total bond remains to be sold. The last bond sale is anticipated in April 2015 and will include funds for traffic signal upgrades, streetscapes, and street resurfacing and will be received in FY 2015 - prior to the beginning of this Plan's 10-year time frame. In order to maintain the improvements made under the bond and continue to improve streets and public right of way assets, the plan recommends pursuit of dedicated long-term funding sources for street resurfacing as the heavily-tapped General Fund lacks capacity to fully meet these needs.

Potential funding sources to help support the General Fund's contribution could include mechanisms like a Vehicle License Fee or an increased sales tax – both of which were recommended by the Mayor's 2030 Transportation Taskforce as potential tools to help address transportation unfunded needs.

Since the last Capital Plan, the City has committed to Vision Zero, with the goal of zero traffic fatalities in San Francisco by 2024. San Francisco's capital expenditures in streets and right-of-way infrastructure improve safety in myriad ways. Funded by the RRSS G.O. Bond, federal and state grants, and local dollars, Public Works completed several streetscape projects in the past two years that included extensive safety improvements, such as: Cesar Chavez Streetscape; Great Highway Streetscape; Polk contra-flow bike lane; Sloat and Forest View pedestrian improvements; and Balboa Streetscape Improvements. Roadway repaving creates a smoother surface and renews street and crosswalk markings, which improves the safety of drivers, bicyclists, and people in crosswalks. Additionally, the City continued to reaffirms its enduring commitment to safe and accessible paths of travel for people with disabilities by making capital improvements to curb ramps, sidewalks, street crossings, and roadways across the City.

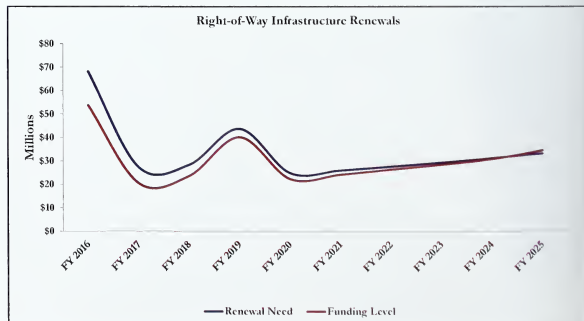


Bridge Deck Repair

1. Renewal Program

The Plan proposes \$1.2 billion in renewal funding for streets and right-of-way assets. Of this, about 74% percent (\$874 million) will be used to fully fund the street resurfacing program to allow the City to achieve its goal of reaching a Pavement Condition Index (PCI) score of 70 by FY 2025. The remaining \$305 million in renewal funding will go towards right-of-way asset renewals such as street structures, street trees, irrigation systems, and plazas. Under this Plan's proposed funding assumptions, the right-of-way renewal program (excluding street resurfacing) will be underfunded until FY 2024. However in FY 2025 funding will meet the annual need and for the first time in the Plan's history the City will be able to start addressing its renewal backlog. The following chart provides an overview of renewal funding.

Street Resurfacing. The City's Public Works Department oversees the maintenance of 865



miles of streets. Its pavement management strategy is to apply the right treatment to the right roadway at the right time. Without regular resurfacing treatments, a street could end up costing the City four times more over the course of its life cycle. As approved by city officials and voters, Public Works' goal is to achieve and maintain a Pavement Condition Index score (PCI) of 70. This target will take streets from being on the brink of considered "fair" to a more cost-effective "good."

Historically the Street Resurfacing Program had been supported by federal, state and local sales tax revenues, which have dwindled over the past few decades. As a result, the City has relied largely on RRSS G.O. bond proceeds and the General Fund to fund the program in recent years. Under the proposed Plan, the City expects to increase its average PCI score from a pre-bond low of 64 in FY 2012 to "good" 70 by FY 2025.

The Mayor's Transportation Task Force 2030 suggested a local Vehicle License Fee be established to help support ongoing General Fund contributions to this program, and that option is under consideration by the City. In order to meet the City's PCI 70 goal, the Plan assumes an average annual General Fund contribution of approximately \$63.5 million over the next 10 years.

Curb Ramp Renewal. The City is committed to improving curb ramps and providing accessible paths of travel for people with disabilities. This renewal program complements the Public Right-of-Way Transition Plan Improvement (listed below in the *Enhancement Program* section) by ensuring funds for maintaining previously installed ramps, which often entails repairing truncated domes on ramps. The life cycle of a curb ramp depends on its traffic volume and usage and is highly variable ranging anywhere from 5 – 30 years. Renewal costs typically range from \$1,800 to \$2,000 per ramp. The Plan proposes investing \$3.4 million into the program over the next decade.

Street Structures. Public Works is responsible for maintaining 357 City-owned street structures, including retaining walls, stairs, bridges, viaducts, tunnels, underpasses and overpasses, plus numerous guardrails. The Street Structure program funds general renewal and repairs of these structures to maintain public safety and proper operations of movable bridges, in addition to minimizing long-term renewal costs. While the program received \$7 million through the RRSS G.O. Bond, the City's street structure need over the next ten years is estimated to be \$131 million – more than double the size of the previous Plan's estimate of \$56 million. This increase is largely due to the completion of a recent street structures analysis which identified a number of newly emerged needs including significant stairway improvements and moveable bridge repairs. With an estimated need of \$62.3 million over the next decade, moveable bridge repair work makes up the bulk of the need. To date, Public Works has secured federal funding for Islais Creek Bridge (currently in design phase with an estimated construction start in FY 2016) and is pursuing an estimated \$55 million in additional federal funding to address repairs for the Third Street and Fourth Street Bridges.

In total, the Plan proposes investing \$107 million into the Street Structures program over the next decade.

Street Tree Planting, Establishment, and Maintenance. By FY 2016, Public Works will be responsible for maintaining approximately 15,000 of San Francisco's 105,000 street trees. Maintenance for the remaining trees will be the responsibility of fronting property owners. Ideally, mature trees should be pruned every three to five years to maintain healthy growth and provide ADA-mandated width and headroom over sidewalks. At present, Public Works is only able to prune trees on a 14-year cycle because of limited operating funds. Under these circumstances, the City established a tree relinquishment program in 2010 that transfers street tree maintenance to property owners. Mature trees are transferred once they have been inspected and pruned. Young trees will be transferred



Street Improvements



Street Tree Maintenance

once they have passed through their delicate establishment period and have been inspected by Public Works crews. Trees in median areas and in front of Public Works property will remain Public Works' responsibility.

Additionally, on average, the City replaces 375 trees each year as a result of typical tree mortality, disease or vandalism. Planting new trees avoids leaving empty tree basis, which can present tripping hazards and collect trash. Once planted, young trees require frequent watering and re-staking for the first five years in order to foster the root system and promote tree growth. The highest loss rates of young trees happen within the first three years of planting.

The Plan proposes \$59 million in funding, to fund both the annual need and the accumulated backlog, resulting in a maintenance cycle of five years for trees remaining under Public Works jurisdiction, and continued relinquishment of trees. The cost for Public Works to resume maintenance of all street trees would require an additional \$247 million of funding, and is discussed further in the emerging needs section.

Sidewalk Improvements and Repairs. The Sidewalk Inspection and Repair Program (SIRP) proactively inspects and makes necessary repairs to approximately 200 square blocks of the City's sidewalks annually. This ensures that the City's approximately 5,000 street segments are inspected on a 25-year cycle. Public Works' Accelerated Sidewalk Abatement Program (ASAP) addresses requests for action outside of SIRP zones, especially at high-priority locations, like those where a claim has been filed against the City.

Property owners who do not make the repairs identified by Public Works (through SIRP or ASAP) are assessed a fee, plus the cost of sidewalk abatement if the City has to perform the repair. Of the 218 blocks inspected by SIRP in FY 2014, more than 3,000 notices to repair were issued to private property owners. In that same year, SIRP repaired 224,000 square feet of sidewalk, of which 38 percent was on private property sidewalks (and thereby largely funded using assessed fees). ASAP inspected 168 locations and repaired an additional 91,000 square feet of sidewalk.



Median Planting

Public Works also repairs sidewalks around approximately 325 publicly-maintained street trees annually. This work is funded by local sales tax dollars and state Transportation Development Act funds. Repairs are limited by the amount of funds available from these sources each year.

The Plan fully funds the \$85 million sidewalk inspection and repair need.

Landscape Maintenance. As San Francisco replaces more cement and concrete with green spaces, investment in maintaining these areas is essential for keeping them free of trash and ensuring the health of plants. With more than 60 landscaped medians across the city, irrigation systems require routine maintenance and repairs to prolong their useful lives and keep the landscaping in good condition. The program is funded mainly through the General Fund, although Public Works receives a small amount of State Gas Tax funds. The total 10-Year need is approximately \$44 million, and given funding constraints, the Plan proposes funding \$42 million.

Plaza Inspection and Repair. Public Works is responsible for maintaining nine plazas throughout the City. Similar to the programs in place for street structures and sidewalks, Public Works conducts annual inspections of these public spaces. Public Works estimates the current inspection and repair costs for the next ten years to be \$8.7 million, which excludes any proposed plaza enhancements (above and beyond standard repairs) being considered in other programs, like the Market Street Plaza Enhancement Program, listed below in the Deferred Section of this Chapter. The \$8.7 million in need represents a significant increase over the last Plan's estimate of \$3.4 million. This increase stems from a more recent engineering analysis by

Public Works staff regarding the maintenance needs of the Plazas and current cost data. The Plan proposes investing \$8.1 million over the next decade.

2. Enhancement Program (FY 2016 – FY 2025)

The majority of needs for streets and right-of-way assets are categorized as renewals. However the City will be undertaking some major enhancement projects over the next ten years.

Public Right-of-Way ADA Transition Plan (Curb Ramps and Sidewalks).

Title II of the Americans with Disabilities Act (ADA) requires local entities to develop a transition plan for the public right-of-way. San Francisco's ADA Transition Plan describes the City's existing policies and programs to enhance accessibility in the right-of-way, including curb ramps and sidewalks. As mentioned previously, the City is committed to improving curb ramps and providing accessible paths of travel for people with disabilities. The Plan proposes fully funding the ADA Transition Plan totaling \$71.1 million over the next 10 years. The Plan assumes \$58.7 million will be funded through the General Fund, while the remaining \$12.4 million will come from a combination of RRSS proceeds, Prop K revenues and state funding. The goals of the transition plan are also furthered by the Capital Plan's investment in repaving, which installs most of the new ramps in the City annually. For example, in FY 2013-14, approximately 60% of all ramps built in the City that year were done as part of, and funded by, repaving projects.



Curb ramp at Ines

Better Market Street. San Francisco's vision for a Better Market Street is a comprehensive program to reconstruct the City's premier cultural, civic and commercial center and the region's most important transit corridor from Octavia to the Embarcadero. The program will support the City's planned growth and economic development by delivering a vibrant and inclusive destination where people want to live, work and visit and to make it easier and safer for them to get around. Key goals include bringing new life to the sidewalks, providing more opportunities for adjacent neighborhoods to influence the look and feel of Market Street, enabling faster and more reliable surface transit and improving safety, accessibility and mobility for everyone on the City's busiest pedestrian street, busiest bicycle thoroughfare and busiest transit corridor. The program will advance several key City policies: Vision Zero, Transit First, Complete Streets and the SF Bicycle Plan. The project will achieve many renewal needs along the corridor, including repaving of the roadway, sidewalk and crosswalk reconstruction, replacement of MUNI overhead wires and tracks, upgrades to the traffic signal infrastructure, sewer repair, water main work, and replacement of AWSS facilities. Better Market Street is currently in the environmental review phase and is estimated to cost up to \$385 million, although the project may be scaled differently depending on the outcome of the environmental review and the amount of funding the City is able to secure for the project. Whatever the nature of the Market Street improvements that eventually emerge from environmental review as the Locally Preferred Alternative, the City's recently passed transportation bond is expected to be used to fund a significant portion of the work. Construction is estimated to begin in 2018.

Public Works Yard Optimization. This project would reconfigure space at Public Works' Operation Yard to optimize utilization of space and vertical development potential resulting in greater operational efficiency, energy efficiency improvements and waste reduction. The cost for the full Yard Optimization project is estimated to be \$129 million.

This Plan proposes investing \$100 million of General Fund Debt proceeds in FY 2024-25 to fund the project, leaving \$29 million unfunded. The Public Works Department is currently exploring the possibility of making valuable real-estate space at the operations yard site available to a partner City agency to help fund the project. Over the coming years, the City will work to identify additional revenues and refine project scope to solve for the current funding gap.

3. Emerging Needs

In addition to the renewal and enhancement projects and programs above, the City is in the early planning stages of three other capital efforts.



DPW Tree Planting

Public Works' Materials Testing Lab. The Public Works' Materials Testing Lab must vacate its current location by mid 2016 to make room for the PUC's expansion of the Southeast Treatment Plan. The project cost for materials testing lab relocation is estimated to be \$11.5 million.

Managing and Growing the Urban Forest (Urban Forest Project). Based on findings from an AECOM Urban Forest Master Plan and Financial Assessment, the Urban Forest Project would entail Public Works taking over full maintenance responsibility for all 105,000 street trees. This would mean that the City would assume maintenance responsibility for approximately 92,000 street trees which are the responsibility of private property owners or other public agencies. Having a single entity, with adequate resources, responsible for maintaining street trees would mean better and more efficient maintenance of street trees, eliminate the public safety risks associated with poorly maintained trees, and be consistent with how

most U.S. cities manage their street trees. Public Works would plant 2,900 trees a year to replace those lost to normal mortality and grow the urban forest. The proposal standardizes tree care by bringing urban forest management under one steward who can affect maintenance on contiguous blocks of trees, rather than burdening thousands of property owners with ad hoc care of the trees fronting their own properties. Under the plan, all street trees would be maintained on a five-year cycle.

The proposed urban forest management and growth scenario would cost the City an estimated \$142.6 million more than the current relinquishment program. Efforts to fund these additional costs through a parcel tax or other measure are currently being explored. If a dedicated long-term funding source for tree maintenance is secured, that funding source would potentially also cover the cost of tree-related sidewalk repair. This would greatly reduce the funding needed for SIRP and ASAP.

HOPE SF Emerging Needs. As described in the Health and Human Services chapter, the Mayor's Office of Housing and Community Development (MOHCD) is in the process of developing four severely distressed public housing sites into vibrant mixed income communities. Funding is in place for public infrastructure needs (streets, rights-of-way, and public utilities) for the first two sites, Hunters View (HV) and Alice Griffith (Alice), through a combination of State funding, redevelopment funding and master developer mitigation funds. The City is ready to close the predevelopment phase for Potrero Terrace and Annex and Sunnydale-Velasco by the end of FY 2015 and commence the long-planned, multi-phased developments for those sites. As was the case for Alice and HV, the newly redesigned and installed streets, sidewalks, public rights of way, and other infrastructure will become City-owned at its completion. Although City funds for the full build-out have not yet been identified, infrastructure funding should proceed according to the established HOPE SF model, with City sources leveraging other funding such as State infrastructure and transportation dollars.

4. Deferred Projects

Below is an overview of major projects that the Plan is proposing to defer due to lack of funding.

Streetscape Improvement Program. Streetscape improvements can transform corridors,

spur economic vitality, and improve safety on streets, alleys, and other public right-of-way spaces. Through RRSS, the City is investing a total of \$50 million in significant streetscape, pedestrian and bike safety improvements. To date, \$35.2 million in bond funding has been issued to support the design and construction of streetscape projects across the City. Public Works is also undertaking additional streetscape improvement projects with Federal grants, matched with local and state dollars. These include Broadway Chinatown Streetscape improvements (phase 4 of the Broadway improvements, which will extend the streetscape to the Broadway Tunnel); transformative pedestrian and bicycle improvements of the 2nd Street Streetscape and along Masonic Street. Finally, the City's impact fee program is funding street and right-of-way infrastructure improvements called for in various Neighborhood Plans. For more information about these projects please refer to the Planning Department section within the Economic Development Chapter of the Plan.

To guide decisions about where to invest future funds which become available for streetscapes, an interagency team, led by the Controller's Office and Planning Department, is developing a prioritization methodology and list of priority projects distributed across the City. This process will be vetted city-wide and with public stakeholders through early 2015. The estimated need is based on the following Public Works Strategic Plan Goals: (1) completing four streetscape projects per year; (2) improving two alleyways per year; and (3) improving one plaza like space in the right-of-way per year.

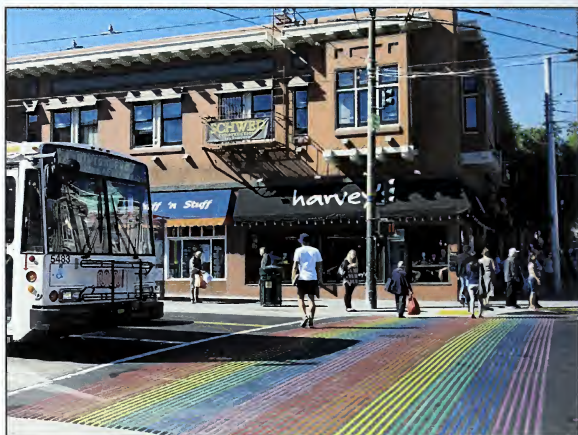
Coordinated Safety Improvements. The intent of Coordinated Safety Improvements is to implement additional safety upgrades (not already included in pedestrian and bike safety programming) in conjunction with other major right-of-way projects, such as street resurfacing or curb ramp construction. This project coordination captures cost efficiencies that enable to the City to efficiently deliver more safety improvements at reduced costs. Typical improvements include pedestrian islands, bike lanes, crosswalk enhancements, and traffic calming measures. Public Works estimates that the ten year cost to implement projects in conjunction with the City's Street Resurfacing and Curb Ramp Programs would be \$37 million.

Bayview Transportation Improvements (BTI). This program will implement key segments of the Candlestick Point-Hunters Point Shipyard transportation plan helping to reduce truck traffic on Third Street and residential streets and to develop a more direct truck route between US-101 and existing and planned development in the Bayview and Hunters Point Shipyard. Proposed improvements include the rehabilitation and reconfiguration of the right-of-way to increase roadway capacity, pavement condition, street trees, sidewalks, curb ramps, bike lanes, bulb-outs, and traffic calming in certain areas. Project costs are estimated to be \$37 million. Funding for these projects has not been identified.

Market Street Plaza Enhancements. This project would bring major improvements to United Nations (UN), Hallidie, and Mechanics Plazas along Market Street, making them more inviting, active spaces. These plaza improvements would complement the improvements to the right-of-way from the Better Market Street project and increase the condition and use of public space along the City's core thoroughfare. Based on the conceptual designs, improvements could include: decking over the sunken plaza at Hallidie, creating a space for civic events at the UN Plaza, regrading to address accessibility issues at the Mechanics Plaza, and increasing seating at all three locations. Project costs are estimated to be \$81 million.

Jefferson Street Streetscape, Phase 2. Phase one of the Jefferson Streetscape improved economic vitality along the Jefferson Street commercial corridor between Larkin and Jones through safety and beautification improvements such as wider sidewalks, special pavement, and pedestrian-scale lighting. Phase two would continue the streetscape improvements on Jefferson Street from Jones to Powell streets, to extend the improvements along the entire corridor. The estimated cost of the project is \$13.7 million.

Undergrounding Utilities. Overhead utility wires and related infrastructure are potential public safety hazards and a visual blemish on San Francisco's vistas. This project would involve relocating overhead utility wires underground. Undergrounding utilities reduces the frequency of needed maintenance, but requires a large up-front investment. Generally, undergrounding costs roughly \$8 million per mile. The estimated cost to underground utilities across the City over the next 10 years is nearly \$ 1 billion. Funding for the project has not been identified to date. Going forward the City will continue to explore funding options as well as potential leveraging opportunities associated with other right-of-way projects that involve opening up the roadway.



Public Utilities Commission

To distribute water to its nearly 2.6 million customers, the SFPUC operates and 390 miles of pipelines in the regional system and 1,235 miles in San Francisco; 74 miles of tunnels in the regional system; five regional pump stations and 22 in the City; 25 reservoirs; 16 dams; eight water tanks; and three water treatment plants that serve both the regional and City systems; 993 miles of City sewers, a majority of which are combined sewers that collect a combination of sanitary sewage and stormwater runoff; 56 sewage pump stations and six stormwater pump stations; four wastewater treatment plants that provide liquid and solids treatment; five deep water outfalls; 36 overflow structures for combined sewage discharges around the shoreline of the City; and 50 stormwater outfalls around Treasure and Yerba Buena Islands. The Auxiliary Water Supply System (AWSS) delivers water dedicated to fighting fires at high pressure throughout the city. It includes two pump stations, two storage tanks, one reservoir, and approximately 135 miles of pipes. The system also includes 52 suction connections along the northeastern waterfront, which allow fire engines to pump water from San Francisco Bay, and two fireboats that supply seawater by pumping into any of the five manifolds connected to AWSS pipes. The AWSS also includes 1,600 hydrants and 3,828 valves.

To provide reliable electric power to its customers, the SFPUC operates and maintains the Hetch Hetchy Reservoir, smaller dams and reservoirs; over 150 miles of pipelines and tunnels, power generation facilities and power transmission assets including over 160 miles of transmission and distribution lines to the Newark substation. Hetchy provides electric power to satisfy the municipal loads and agricultural pumping demands of the Modes to and Turlock Irrigation Districts.

This complex network of facilities and infrastructure is managed by three utility enterprises within the SFPUC: Water, Wastewater and Power. In addition, these three enterprises provide utility services on Treasure Island and Yerba Buena Island pursuant to a contract with the Treasure Island Development Authority (TIDA). The table below shows proposed SFPUC capital expenditures over the next ten years for each enterprise.

Enterprise	Total Expenditures
Water	\$ 1,327,598,000
Wastewater	5,713,380,000
Hetch Hetchy Water & Power	1,199,284,800
Total Water Enterprise	\$ 8,240,262,800

Highlights and Accomplishments

Water Enterprise Accomplishments

- Major improvements to regional seismic reliability were achieved, highlighted by the completion of the new Bay Tunnel.
- Maintained continuous water deliveries and service during capital program-related construction with no supply interruptions
- Completed seismic upgrades to many AWSS facilities. Brought the new Bay Tunnel online in October 2014
- Prepared third biennial State of the Regional Water System Report
- Launched My Account web portal allowing retail water customers access to their water use data
- Managed through the continuing drought by working with Wholesale and Retail customers to achieve greater than 10% demand reduction in 2014
- Continued to implement the Watershed and Environmental Improvement Program
- Continued to support large volumes of applicant-funded water service connections, and other work related to large-scale development in San Francisco.

- Maintained elevated water main replacement rate.

Wastewater Enterprise Accomplishments

- Completed two years of implementation of the SSIP Phase 1 Projects (\$2.7 billion) which includes the Biosolids Digester Facilities Project, Southeast Plant Grit and Odor Control Upgrades, Central Bayside System Improvement, the Early Implementation Green Infrastructure Projects (EIPs), and Operational/Reliability Improvements Projects for Treatment Plants and Collection System.
- Completed the Southeast Plant Oxygen Generation Plant construction.
- Completed the construction of two grit pilot plants that will support technology selection for the Southeast New Headworks Replacement Project design.
- Awarded construction contract for the Channel Green Infrastructure Project aka the Wiggle Neighborhood Green Corridor (Fell Street and Oak Streetscape Enhancements). Continued planning and design on the remaining eight EIPs.
- Completed professional services consultant selection processes for Biosolids Digester Facilities Project, Southeast New Headworks (Grit) Replacement Project, and Oceanside Treatment Plant Project.
- Completed the Alternative Analysis Report for the Biosolids Digester Facilities Project, the Southeast New Headworks (Grit) Replacement Project and the Westside Pump Station Upgrades Project.
- Completed Sea Level Rise Mapping of Bayside and Westside.
- Issued plans and specifications for upgrading 1550 Evans to be the future headquarters for the WWC Collection System Division.

Hetch Hetchy Water Accomplishments

Water Infrastructure

- The Mountain Tunnel Rehabilitation Alternative Analysis Report was completed in September 2013.
- The design of Lower Cherry Aqueduct Emergency Rehabilitation (LCAER) Project was completed. The first phase of debris removal and tunnel repair was completed in October 2014.

Power Infrastructure – Transmission Lines / Switchyards

- Early Intake Switchyard was upgraded with SF6 (Sulfur Hexafluoride) gas insulated high voltage circuit breakers in February 2014.
- The design of new towers to alleviate the clearance issues over Don Pedro Reservoir was 95% completed.

Joint Projects – Water Infrastructure

- The construction of Moccasin Control and Server Building, under Contract HH-963R, started in September 2014.
- The design-and-build contract DB-124 San Joaquin Valley Communication System Upgrade commenced in November 2014.

Hetch Hetchy Power Accomplishments

Streetlights



Water Main Repair

- Converted over 100 existing SFPUC-owned streetlights to light emitting diode (LED), including San Bruno Avenue and in the process of converting more.
- Responded to over 73 public initiated requests for street and pedestrian lighting improvements.
- Repaired 4059 street light outages.
- Restored 23 street light pole knockdowns; 80% were completed within 21-day level of service goal.
- Converted 7,600 feet of high voltage series loop circuits into standard service voltages and replaced lamps with a total of 47 LED street lights on the west side of Lakeshore.

Transmission & Distribution

- Delivered and billed 1,100 GWhs for over \$100 Million in revenue.
- Negotiated and signed an electric service agreement with the Transbay Joint Powers Authority to be the exclusive provider of electric services to the Transbay Transit Center (TTC) which includes the downtown rail extension, bus ramps, bus storage facility, and other related facilities, totaling about 4.3 megawatts of load upon opening (October 2017) and expected to grow to 8 MW by 2024.
- Installed 12-kV primary distribution conductors, transformers, switches, and meters for the construction of over 250 new residential units at HPS Phase 1 Development. Over 80 units are projected to be completed and ready for sale on the market by February 2015.
- Design work continues on the development of Candlestick Point and HPS Phase 2.
- In October 2013, SFPUC Made final payment to the State of California Department of Transportation for installing two 1,000-kcmil electric submarine cables from Oakland to Treasure Island.
- Installed a new 12-kV transformer and service for the U.S. Coast Guard at Yerba Buena Island (YBI) in 2014.
- Completed the relocation of approximately 50 feet of 2.4-kV overhead lines and poles at YBI for Caltrans in June 2014 as part of the new San Francisco-Oakland Bay Bridge ramps to YBI.
- Design Work continues with the SF Port to relocate and install new 12-kV overhead



Cherry Valley Dam

distribution lines to serve existing and new tenants at Pier 70.

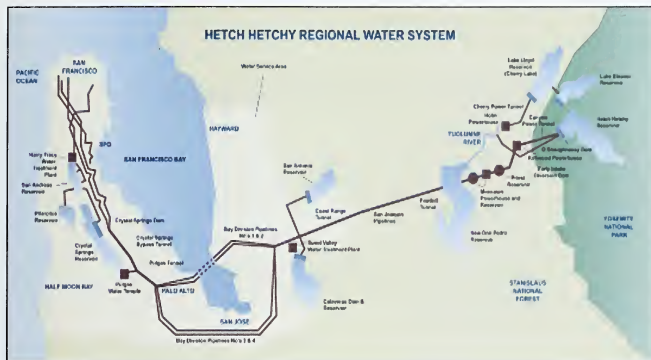
- Procured new Energy Trading Risk Management (ETRM) software to replace obsolete power scheduling software. The deployment of this software allows Headquarters staff to schedule power onto the transmission grid, as required, with the California Independent System Operator and perform more sophisticated analysis on power market settlement data. This software will also allow staff to manage Power's risk exposure.
- Procured new integrated energy model to optimize generation resources, including hydro-generation. This will improve scheduling and allow for optimization on a portfolio basis. Additionally, this software will support integrated resource planning and allow us to better understand the cost of generation resources.

Renewable Energy Generation

- Installed 300 kW of rooftop solar projects located at Muni (700 Pennsylvania), North Beach Library, and Davies Symphony Hall.
- Completed design for four (4) solar projects, three (3) located on SFUSD facilities (Downtown High School, Thurgood Marshall High School, and Cesar Chavez Elementary School) and the solar project located on City Hall.
- Operated and Maintained 17 Solar PV projects totaling 2.7 MW.
- Provided 558 San Francisco properties with \$2.3 million in incentives toward rooftop solar for 2.3 MW installed solar PV in San Francisco, employing 18 disadvantaged San Franciscans.

Energy Efficiency

- Benchmarked the energy performance of almost 450 public buildings, including more than 46 million square feet of building area.
- Completed 7 energy efficiency projects at various General Fund department facilities, improving lighting, heating, ventilation and air conditioning, as well as comfort at the facilities, for 2.2 MWhs of saved electricity each year, and 1.8 million therms of natural gas savings each year.



SFPUC - Water Enterprise

Project costs for the Water Enterprise total \$1.3 billion. The cost of the 10-year Water Enterprise Capital Plan is less than investments from the Water System Improvement Program (WSIP) but higher than historical amounts to make more consistent on-going investments. The following table shows regional and local infrastructure investments proposed over the next ten years.

Regional	(\$ Millions)
Water Treatment Program	26.3
Water Transmission Program	195.5
Water Supply & Storage Program	254.3
Watersheds & Land Management	15.8
Communication & Monitoring Program	8.1
Buildings & Grounds Programs	44.0
WSIP Augmentation - Regional	53.2
Total - Regional	597.1
Local	
Water Conveyance/Distribution System	519.0
Buildings & Grounds Improvements	17.2
Pacific Rod & Gun Club Remediation Project	0.2
Systems Monitoring & Control	11.7
Water Storage Facilities/Pump Stations	25.5
Other Recycled Water Projects - Local	3.9
WSIP Augmentation - Local	40.0
Treasure Island Capital Upgrades	3.0
Auxiliary Water Supply System	110.0
Total - Local	730.5
Total Water Enterprise	1327.6

A combination of Water Enterprise revenue, revenue bonds, general obligation bonds, and capacity fees are proposed to fund these capital needs; some projects will be deferred if funding is not available. Funds for Treasure Island capital improvements are generated by utility service charges and TIDA.

1. Renewal and Replacement Program

Funding for the Water Enterprise's renewal and replacement (R&R) program is approximately \$1.3 billion over the next 10 years including WSIP Augmentation. The proposed R&R program includes investments to keep the water systems operational with the goal of reaching and maintaining a state of good repair.

Regional Water Treatment Program. This program includes reliability-related upgrades to the Sunol Valley and Harry Tracy Water Treatment Plants. Projects are identified through condition assessments, operation staff reviews, level of service and feasibility studies and alternative analysis at each plant. Projects include upgrades of chemical dosage, flow monitoring, valve and pump replacement and chemical handling upgrades.

Regional Water Transmission Program. This program will provide upgrades to the Transmission System including pipeline inspection and repairs, valve replacements, metering upgrades, corrosion protection to extend the useful life of the pipelines, pump station upgrades and vault upgrades.

Included is \$125.7 million funding for Pipeline Improvement Program over the next 10 years to replace or slip-line up to 10 miles of pipelines in densely populated areas to improve operational reliability and reduce liability.

Also included is funding for pump station upgrades, valve replacements, corrosion protection, metering upgrades, and Calaveras Micro Turbine Project - a small renewable hydroelectric turbine (approximately 1 megawatt - MW) on the Calaveras Pipeline near the Sunol Valley Water Treatment Plant using energy from water stored in Calaveras Reservoir.

Regional Water Supply & Storage Program. This program includes upgrades to structures to meet State Division of Safety of Dams requirements including geotechnical work and installation of monitoring systems, and regional desalination project. The plan includes \$228.0 million funding for technical, feasibility studies, and construction for a Bay Area Regional Desalination Project. The project would involve the larger Bay Area Water Agencies working together to develop desalination to serve the water needs of residents and business in the region.

Regional Watersheds & Land Management. This program supports projects that improve and/or protect the water quality and/or ecological resources impacted by the siting and operation of the SFPUC facilities. Projects including the repair, replacement, maintenance, or construction of roads, fences, or trails, the acquisition of easements and/or fee title of properties, (within the Pilarcitos Creek, San Mateo Creek, or Alameda Creek watersheds), and other ecosystem restoration or public access, recreation, and education projects.



Regional Communications & Monitoring Program. This program includes the development of a microwave backbone link for the entire SFPUC Regional water system from the Hetch Hetchy Dam site in Yosemite to the rest of the SFPUC sites (San Francisco, San Mateo, Santa Clara and Alameda counties). The project will provide much needed redundant emergency communication capability, and increased bandwidth for security data transfer. This program also funds the design, construction, integration, and upgrade of the existing security system for the Water Supply and Treatment Division including future capital improvement projects.

Regional Buildings & Grounds Programs. The program provides funding for major improvements to the Sunol and Millbrae Yards. Sunol Yard improvements include replacement structures for maintenance shops and equipment storage, new fueling center and administration building, re-surfacing of yard, and demolition of six dilapidated structures. Funding in FY 2015-16 is \$25.9 million.

Regional WSIP Augmentation. Additional funding for WSIP is needed to ensure Calaveras Dam will meet the seismic reliability objective and restore the historical capacity of the reservoir, add security related site improvement at the New Irvington Tunnel, and upgrade the facilities/outlet structures necessary to transport water from upper to lower Crystal Spring Reservoir. The majority of the funding for the WSIP Augmentation, \$53.2 million is budgeted in the first two years of the plan.

Local Water Conveyance/Distribution System. To install, replace and renew distribution system pipelines and service connections for the 1,230 miles of drinking water mains in San Francisco and meet customer level of service goals for uninterrupted service. The increased investment is needed to improve annual replacement rate from the current 12 miles per year average to an increased rate of 15 miles per year to minimize main breaks. Improvements include replacement, rehabilitation, re-lining, and cathodic protection of all pipe categories to extend or renew pipeline useful life. Renew aging assets between the water main and the customer's service connections; repair or replace broken or outdated meters and sidewalk and roadway restoration and addition to provide material and labor for installation of new domestic, fire, and irrigation services to new customers.

Local Buildings & Grounds Improvements. This provides funding for capital improvements at City Distribution Division (CDD) facilities and structures. Projects in-

clude a new fueling station, yard improvements to address health and safety issues and security, a comprehensive arc flash and electrical hazard study and construction of a seismically reliable building for CDD's communications and control systems.

Pacific Rod & Gun Club Remediation project. Includes the funding for the planning, environmental review, excavation and disposal of lead contaminated soil at the Pacific Rod & Gun Club site. Following removal of impacted soils, the excavated areas will be backfilled with clean soil which enable future unrestricted safe reuse of the site.



AWSS Pipelines, Hydrants, and Cisterns

In FY2014-15 a \$9.5 million supplemental appropriation was requested to fund this project.

System Monitoring and Control. This project provides improvements to facilities that control and monitor San Francisco's water distribution system. Facilities include enhancements to the System Control and Data Acquisition (SCADA) for remote monitoring of pressure, flow, and valve position status at key locations throughout the distribution system. This program will also install fiber optic communications to critical facilities and security installations not completed under WSIP.

Water Storage Facilities/Pump Stations. A total \$25.5 million over 10 years for upgrading the College Hill Reservoir outlet structure retrofit; rebuild the McLaren Park Pump Station which includes constructing a new reinforced concrete building with bridge crane, new pumps, new electrical system, new stand-by generator and generator building, replacement of surge tanks, security fencing, water quality monitoring; and repair the Merced Manor Reservoir facilities with the aging exterior, Fiber Reinforced Polymer (FRP) overlay for the roof diaphragm to strengthen the roof shear capacity to insure that it is able to resist the stresses resulting from a major earthquake.

Other Recycled Water Projects. This includes recycled water projects for retail customers near Daly City, Redwood City and South San Francisco. Projects will contribute to SFPUC's overall water supply diversification goal, providing additional recycled

water use for irrigation, which will be a direct offset of potable water currently used to irrigate parks, cemeteries and golf courses.

Local Water System Improvement Program (WSIP) Augmentation. Additional funding through WSIP will be needed for the construction of the San Francisco Westside Recycled Water Project and the San Francisco Groundwater Supply Project which include the recycled water treatment facilities, storage, and distribution system to produce and deliver approximately 2 MGD of recycled water to customers on the western side of the City, and building required facilities to produce and deliver an average of 4 MGD of groundwater from Westside Basin in San Francisco to the Sunset and Sutro reservoir.

Treasure Island. Existing water facilities on Treasure Island and Yerba Buena Island are unreliable and investments in existing infrastructure are needed to maintain reliable service. This capital funding would be used to upgrade infrastructure for existing tenants on the islands if developer-funded projects do not occur in FY2016-17 (or for emergency interim work). Any interim investments would be planned to be consistent with long-term planning and development of the islands.

Auxiliary Water System (AWSS). The 2010 Earthquake Safety and Emergency Response (ESER) bond provided funding for repairs to the AWSS to increase the earthquake safety response capacity of the Fire Department following a major earthquake and during multiple-alarm fires from other causes.



In June 2014, San Francisco voters approved Proposition A – the Earthquake Safety and Emergency Response Bond 2014 (ESER 2014) for \$400 million. ESER 2014 bonds will pay for repairs that will allow San Francisco to quickly respond to a major earthquake or disaster and includes \$51.4 million for the AWSS

The AWSS capital plan includes \$110.0 million over the next 10 years, including \$92 million pending voter approval in a proposed bond in FY2018-19, for improvements or replacement of existing firefighting pipes and tunnels, construct new or retrofit existing cisterns, and improve and seismically upgrade two pump stations, two storage tanks, and the primary reservoir. The project will be funded through the issuance of City of San Francisco General Obligation Bonds.



SFPUC – Wastewater Enterprise

The Wastewater Enterprise (WWE) is responsible for protecting public health and the San Francisco Bay and Pacific Ocean water environment by collecting and treating storm and sanitary flows. Assets include 993 miles of combined storm and sanitary collection system pipes, sewer mains, storage structures and tunnels.

The WWE is currently developing the Sewer System Improvement Program (SSIP), a long-term capital plan outlining strategies to improve wastewater infrastructure. The ten-year capital plan shows \$5.7 billion in Wastewater needs.

Southeast Water Pollution Control Plant	Chavez/Army Circle Lift Station
Bruce Flynn Pump Station	Geary Expressway Lift Station
Oceanside Water Pollution Control Plant	Sunnydale PS & Transport
Westside Pump Station	Rankin Wet Weather Lift Station
Zoo Wet Weather Lift Station	Richmond Chemical Station
North Point WWF & North Shore Pump St	Berry Pump Station
Channel Pump Station & Transport	Richmond Transport
Southeast Booster Pump Station	North Shore Transport
Griffith Pump Station	Islais Creek Transport
Hudson Avenue Pump Station	Westside Transport
Mariposa Pump Station & Transport	Marina Transport
Palace of Fine Arts Pump Station	Jackson Transport
Pine Lake Pump Station	Yosemite Transport
Sea Cliff #1 Pump Station	Hunters Point Transport
Sea Cliff #2 Pump Station	900 Miles of Sewers
Tennessee Pump Station	3 Ocean/Bay Outfalls
20th Street Pump Station	36 Overflow Structures
Merlin/Morris Pump Station	Southeast Community Facility

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The WWE is currently developing the Sewer System Improvement Program (SSIP), a long-term capital plan outlining strategies to improve wastewater infrastructure. The ten-year capital plan shows \$5.7 billion in Wastewater needs.

1. Renewal and Replacement Program

The Wastewater R&R program includes two major categories: sewer replacements and treatment facilities.

Sewer Replacement Systems included the following projects.



Oceanside Treatment Plant

Condition Assessment Project – Includes cleaning and inspection of large diameter sewers, transport/storage boxes and collection system discharge/overflow structures. The results of the inspection program will identify the R&R Spot Repair and Collection System Sewer Improvements Programs, as well as the SSIP regarding needed sewer repairs. This project will assist with the on-going gathering of data necessary for the Wastewater Enterprise Collection Systems Asset Management Program.

Sewer Replacement/Improvement Program – This program maintains the existing functionality of the sewage collection system and includes planned and emergency repairs and replacement of structurally inadequate sewers. Failure of the collection system will impact the City's ability to handle and dispose of wastewater and stormwater which can lead to public health, safety and environmental risks. Projects are identified utilizing an asset management approach which factors in physical condition, age,

location, risk, public safety, paving schedule and other factors. The estimated cost for sewer replacement in FY 2015-16 is approximately \$54.3 million. This amount increases to \$81.1 million by FY 2024-25 while allowing replacement of 15 miles of sewer per year.

Collection System Spot Sewer Repair Project – This project provides as-needed contingency-based repairs of existing sewer pipes. FY 2015-16 and FY 2016-17 budgets are approximately \$19.9 million and \$20.6 million respectively, projected to repair approximately 700 individual spot sewer locations per fiscal year, to meet the targeted levels of service goals. It is anticipated that this base rate of spot repairs will continue for the next several years and would ultimately decrease as the overall R&R program continues to be implemented.

Treatment Plants. The Treatment Plant Improvement program helps maintain the capacity and reliable performance of the wastewater treatment facilities owned and operated by the Wastewater Enterprise. This is a continuing annual program to extend the useful life of Wastewater treatment assets including Transport Boxes, Discharge Structures, Pump Stations, Force Mains, Tunnels and Treatment Plants.

The projects are prioritized based upon regulatory compliance, condition assessments, operation staff recommendations and level of service goals. The completion of projects under the Treatment Plant Improvement program increase reliability and efficiency of Wastewater Enterprise facilities and will ensure that the performance of the treatment facilities meets the established levels of service. The estimated cost for the treatment plant renewal program in FY 2015-16, is approximately \$13.1 million. This amount increases to \$20.3 million by FY 2024-25

2. Enhancement Program (FY 2015-16 – FY 2025)

In addition to the R&R discussion above, the Ten-Year Capital Plan includes \$4.6 billion for capital improvements to the sewer system. The scope of the capital investments includes three categories of projects: (1) the SSIP totaling an estimated \$4,629 million; (2) Treasure Island's new wastewater treatment facility for \$103.8 million; and (3) Wastewater Facilities and Infrastructure at \$39.3 million.

Sewer System Improvement Program (SSIP). The San Francisco Public Utilities Commission endorsed a \$6.9 billion Sewer System Improvement Program (SSIP) to help the Wastewater Enterprise meet the SFPUC goals and levels of service for operational reliability,

regulatory compliance, effective stormwater management, community benefits, climate change adaptation, economic and environmental sustainability and ratepayer affordability. The SSIP will be implemented in three phases over the next 20 years. Phase 1, \$2.7 billion is currently underway.

The SSIP evaluated the current treatment and collection system to provide a long-term strategy for wastewater and stormwater management to ensure reliability and resilience. The SSIP is based on a comprehensive planning effort that: (1) outlines a long-term strategy for San Francisco's wastewater and stormwater management; (2) addresses specific system deficiencies, aging infrastructure, and future operational and repair/replacement needs; and (3) provides a roadmap for future capital improvement programs, ensuring reliable service meeting all regulatory requirements. The SSIP will be implemented in three phases over the next 20 years, a portion of which is addressed in the FY 2016-2025 Ten-Year Capital Plan.

The Ten-Year Capital Plan as adopted anticipates approximately \$4.6 billion of investments in the SSIP, focusing on projects in the following categories:

- **Program-Wide Efforts** – the SSIP is a series of capital improvement projects focused on improving the wastewater system to meet the present and future needs of the City. The Program-Wide Management Project will support the SSIP implementation, providing condition assessments (facility inspections), project definition and prioritization, public outreach and education, analysis of the impacts of climate change, sustainability evaluation, and general program management (program controls, change control, constructability). The initial focus will be on scope optimization and program implementation of the \$2.7 billion SSIP Phase 1; and the continued development of programmatic schedules, construction cost estimates; and rates and cash flow projections for the SSIP.
- **Land Reuse** – this program addresses long-term planning and ongoing needs for physical space to support SSIP projects by upgrade and/or replacing aging infrastructure. This program will enable the SSIP to proceed with various near and long-term projects to replace aging infrastructure.
- **Treatment Facilities** - projects include the Bayside Biosolids (Digester) Project which funds the planning, design and construction of a new digester and biosolids facility to be located in the southeast area of San Francisco, major improvements to the North Point Facility, North Shore Pump Station and associated outfalls, and major improvements to the Oceanside Treatment Plant, Westside Pump Station and Force Main.
- **Sewer/Collection System** – includes the proposed Central Bayside System Improvement Project providing system enhancements to the Channel Drainage Basin, including needed redundancy for the existing 66-inch Channel Force Main, hydraulic improvements to sewers/pump stations, and improvements to stormwater management through elements of both grey and green infrastructure. Also provides funding for replacement of existing sewers to increase hydraulic capacity; upgrades to odor control, transport/storage boxes, combined sewer discharge structures, pump stations and force mains.
- **Stormwater Management/Flood Control**– include the following projects:
 - o **Drainage Basins** - through Phase I of the SSIP, SFPUC will build, monitor and evaluate the effectiveness of eight green infrastructure projects to minimize stormwater impacts on the aging sewer system throughout San Francisco's eight urban watersheds.
 - o **Green Infrastructure** - this project includes planning and preliminary design support



Sewer System Improvement Program



Oceanside Treatment Plant

for the implementation of green infrastructure projects to be designed and constructed as part of SSIP (Phases 1, 2, & 3). The green infrastructure Early Implementation Projects will demonstrate the performance of Green Infrastructure's ability to manage stormwater and will recommend the site selection and design approach used for future projects.

- o **Advanced Rainfall Prediction** - This project will provide the SFPUC with better rainfall forecasting capabilities, especially 4 to 8 hours in advance of an event, which will be beneficial in managing wet weather flows in the combined collection system.
- o **Urban Watershed Assessment** - The Urban Watershed Assessment and Planning project will evaluate alternatives that balance the use of grey versus green infrastructure for collection system improvements. The SSIP will utilize an integrated urban watershed management approach to investigate the health of the City's Watersheds.

Treasure Island Capital Improvement. On October 1, 1997, concurrent with the operational closure of the Treasure Island Naval Station, the City entered into a Cooperative Agreement with the U.S. Navy in which the City agreed to take responsibility for caretaker services on Treasure Island and Yerba Buena Island. As a result of this agreement, the SFPUC provides utility operations and maintenance services for the wastewater and stormwater systems. This project includes \$103.8 million for the New Wastewater Treatment Facility. A new tertiary two-million gallon per day wastewater treatment facility is proposed for the Treasure Island/Yerba Buena Island service area to replace the existing, aged facility. The new treatment facility will include influent screening, a combined primary/secondary treatment process, anaerobic sludge digestion, sludge dewatering and truck load-out, disinfection, odor control, and tertiary treatment.

Wastewater Facilities and Infrastructure:

- **Collection System Division Consolidation** - This project will focus on consolidating the Collection System Division Administrative and Sewer Operations staff to a centralized location, maximizing the operational efficiency and functionality of the City's sewer cleaning. The completion of this project will provide the Collection System Division with the necessary facilities and infrastructure to effectively manage and respond to a wide range of operating needs and requirements.
- **Ocean Beach Protection Process** - This project is to develop comprehensive shoreline management and protection plan in partnership with relevant stakeholders and regulatory agencies and to establish a long-term solution to the erosion issues along Ocean Beach. This long term solution is necessary to protect the integrity of critical wastewater assets that were planned, built, permitted and constructed to protect public health and the environment.

1. Renewal and Replacement Program

The Hetchy Water renewal and replacement program is comprised entirely of the projected costs of \$1,234.2 million for Hetchy Water. These proposed program costs will be financed with a combination of Hetchy revenues and Hetchy Water & Power revenue bonds.

Many Hetch Hetchy Water and Power facilities and system components are aging and/or have reached/exceeded their useful life. The condition of these facilities and equipment must be or has been assessed and proposed projects evaluated and prioritized based on risk (financial/criticality, safety and regulatory), efficiency of operations, and providing a safe working environment for employees working in remote areas.

Water Infrastructure. The Water Infrastructure capital R&R program will include concept, development, design and upgrades for operating, managing, and maintaining the Hetchy Water Infrastructure. In general, this includes water facilities from Hetch Hetchy Reservoir to Alameda East. The new and upgraded systems will have increased coverage, capacity or reliability, or improve employee safety and/or operating efficiency for those projects. R&R projects include continued rehabilitation to the San Joaquin Pipeline, Priest Reservoir Lining Water Quality, and the Lower Cherry Aqueduct Project which due to age and damage caused by the Rim Fire is unable to reliably convey water from Cherry Creek to Early Intake Reservoir.

Power Infrastructure – Powerhouse & Transmission Lines Switchyards. Hetchy Power infrastructure, facilities and equipment have reached their life expectancy. Power generation will become less reliable if upgrades are not performed.

The Capital Plan provides funding for various generation renewal and replacement projects at the Holm, Kirkwood and Moccasin Powerhouses. Projects include upgrades to the powerhouse protection, control, and monitoring systems, replacement of pumps which divert water from Eleanor to Cherry Reservoir, and upgrades to the existing oil separation system to prevent oil discharges.

The Capital Plan also includes rehabilitation of transmission lines, a condition assessment of the lines to reduce the risk of failure, replacement of large transformers at switchyards that have exceeded their expected life, and renewal and replacement of switchyard and substation components including an inadequate grounding system that may result in potential electrical hazards. Hetchy maintains these assets to avoid transmission line failure resulting in costly repairs and revenue loss.

Joint Projects – Water & Power Infrastructure. The plan includes a condition assessment of all storages, reservoirs and dams to identify and prioritized the work in rehabilitation and upgrades to reservoirs, and dams to address safety and/or environmental concerns

The plan includes \$627.8 million for the Mountain Tunnel Rehabilitation/Bypass Project and condition assessment of all six storage and regulating reservoirs and identifies work to be performed that will be prioritized and included in the plan. Failure to upgrade these facilities could jeopardize the system resulting in loss of storage or conveyance and may impact the SFPUC's water supply reliability and/or the ability to deliver water and generate power.

Also included in the plan are funds for rehabilitating dams, roads, and bridges and upgrading existing or constructing new support structures and facilities, security and communication projects. These improvements will allow Hetchy to meet California Building Code requirements and address life-safety issues. Typical work to be performed includes constructing a new server room and Moccasin firehouse renovation for temporary office space needed during construction of the new shop facilities; building new water distribution system, wastewater collection and treatment facilities or septic systems, road



improvement, and dams rehabilitation.

Reclassification - Power Infrastructure, Joint Water & Power Projects. The Hetchy Water Capital budget includes the reallocation of Hetchy Power infrastructure, \$234.7 million, and Hetchy Power's share (55%) of Joint Water & Power projects, \$506.0 million to the Hetchy Power Capital Budget. These cost reallocations are for projects located up-country and managed by Hetchy Water.

2. Enhancement Program (FY2015-16 – FY2025)

The capital program is comprised entirely of \$123.3 million in projected costs for Hetchy Power.

Streetlights. Hetchy provides power to all of San Francisco's 44,528 streetlights and maintains the 25,509 streetlights owned by the City and funds the maintenance of the 19,019 streetlights owned by Pacific Gas & Electric (PG&E). The approved plan allocates \$11.9 million for streetlight repair and rehabilitation in FY 2016, and a total of \$56.2 million over the duration of the Plan.

Hetchy Power is in the process of performing an assessment of the existing streetlight system, particularly City-owned facilities over 60 years old, and preparing a retrofit/replacement program that will include specific recommendations, strategies for capital recovery, and an implementation schedule. The plan also includes funding for a portion of the engineering and construction costs associated with the replacement of the inefficient lighting systems through the conversion of high voltage series loop circuits in to multiple standard voltage services and replace fixtures with LEDs streetlights as part of the High Voltage 5kV Series Loop Conversion to Standard Voltages.

Transmission and Distribution. Transmission and Distribution projects address the SFPUC's ability to assess and develop City-owned transmission and distribution assets as well as evaluate its reliance on assets owned by a third-party. Projects support the SFPUC's responsibility to provide long-term electric reliability options and services for the City.

Funding in FY 2015-16 for the Transbay Center project to complete construction and permanent electric services to the new Transbay Transit Center, including adjacent bus ramps, and the new bus storage facility at Stillman Street, in San Francisco. The SFPUC, in agreement with the Transbay Joint Powers Authority will provide electric service to the Transit Center by installing two 12-kilovolt (kV) electric circuits, 12-kV switchgear, transformers, and other electrical equipment.

Renewable/Generation Power. In accordance with City policies and directives to increase renewable energy and reduce greenhouse gases, Hetchy Power is continuously developing and implementing new renewable generation resources. The Capital Plan proposes a series of small municipal and energy development projects including solar photovoltaic, solar thermal, biogas fuel cells, wind projects, and other renewable energy projects.

The Capital Plan funds portions of the long-term development of cost-effective, small hydroelectricity projects. Small hydro projects provide the potential for relatively low generation costs, sustainability, and good stewardship of SFPUC's resource. The SFPUC is installing a small hydro project to capture clean renewable energy from Hetchy Water System pipelines that serve the University Mound Reservoir and ongoing development of the Calaveras Small Hydroelectric Plant to be constructed at the Sunol Filter Plant.

The Plan provides funding for the GoSolarSF program administered by Hetchy Power to provide the City incentive payments towards non-municipal solar projects in San Francisco. The program provides incentives to install solar PV Projects in San Francisco. Solar PV projects inherently mitigate the impacts of climate change as they generate energy from renewable resources such as the sun. Solar PV is a proven technology that the SFPUC has installed reliably over the last 10 years. This program also promotes local job creation and



LED Streetlight Installation



Solar Panel Installation

workforce development as it requires contractors to provide entry level job opportunities for referred workers.

Energy Efficiency. Energy efficiency improvements are an important component of an electric utility's resource portfolio. These investments reduce facility operating costs and electric bills for customers, improve system functionality, and reduce the environmental impact of energy use. The Plan proposes funding for lighting and mechanical system efficiency upgrades. These investments are consistent with State policies that place emphasis on energy efficiency and support greenhouse gas reduction.

- General Fund Departments – Funding for General Fund facilities for the planning, design and construction of energy efficiency projects. Energy retrofits include lighting, heating and ventilation, energy management systems and demand response projects. Funds will support municipal facilities for Fire, Police, Public Health, and Human Services Agency, as well as staff to implement projects started in FY 2014-15.
- Enterprise Departments/Other - Funds energy efficiency improvements for Power Enterprise customers paying retail electric rates, including Enterprise Departments, municipal tenants, residential new construction at Hunters Point, Treasure Island, and commercial customers.
- Civic Center District - Planning, design and construction of projects in the green energy district in the Civic Center in accordance with the partnership Memorandum of Understanding with the Clinton Global Initiative. This effort will employ new technologies in energy efficiency and obtain Leadership in Energy and Environmental Design certification for upgraded buildings from the US Green Building Council. This program includes City Hall, Davies Symphony hall, Opera House, Main Library, Public Health Headquarters, Asian Art Museum, Bill Graham Auditorium, Civic Center Garage, and the Civic Center.

Treasure Island/Other Development. The Cooperative Agreement discussed in the Water Enterprise's Renewal Program also requires the SFPUC to provide utility operations and maintenance services at Treasure Island and Yerba Buena Island for the electrical and natural gas utility systems. The SFPUC has developed a work plan for creating a public power utility on each of the islands.

The capital projects identified are required to support the future development electric load at Treasure and Yerba Buena Islands. Current planning shows that the existing electrical overhead poles, lines, and substation are adequate to serve the first phase of development. At some point in the development, when the electric load approaches the design limit of the electric lines at approximately 10 megawatts, the lines will have to be upgraded and subsequently installed underground.

The capital plan also provides funding for the second phase of development at Hunters Point Shipyard, Candlestick Point, and the Alice Griffith Housing Complex. The project will require the installation of new underground 12 kV electrical distribution system in all three areas. The SFPUC as the electric utility provider will install the conductors in the conduits, transformers, switches, and metering equipment required for the electric distribution system.

Reclassification – Power Infrastructure, Joint Water & Power Projects. The Hetchy Power Capital budget includes the reallocation from Hetchy Water for the Power Infrastructure, \$234.7 million, and the Power Enterprise's share (55%) of Joint Water & Power projects, \$506.0 million. The projects are located up-country and managed by Hetchy Water.

3. Emerging Needs

In addition to the renewal and enhancement programs included in the plan, \$213.0 million in additional capital improvements have been identified for the Hetch Hetchy System. These projects will be reviewed in subsequent updates to the plan, and incorporated as needed.

Hetchy Water – (Up-Country)

Water Infrastructure - \$22.0 million for improvements to the San Joaquin Pipeline and Lower Cherry Aqueduct.

Power Infrastructure - \$76.0 million for upgrades to the Holm and Moccasin Penstocks.

Joint Projects - \$115.0 million for renovations to Moccasin Facilities, improvements to roads and bridges throughout the Hetchy system, and dam condition assessments and repairs.

Infrastructure & Streets

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN								DEFERRED
Streets & ROW								
State of good repair renewal - Streets & ROW	114,859	86,438	92,831	112,417	98,522	588,051	1,093,119	-
Public Right-of-Way Transition Plan Improvements	13,288	13,938	14,620	15,336	15,998	83,313	156,493	-
Enhancements - Streets & ROW	-	-	-	-	-	128,082	128,082	1,981,842
Subtotal	128,147	100,376	107,451	127,753	114,520	799,447	1,377,694	1,981,842
SFPUC								
Water Enterprise	162,302	140,925	106,941	126,839	129,989	550,602	1,217,598	
Wastewater Enterprise	536,635	386,924	832,427	947,280	897,768	2,112,345	5,713,380	
Hetch Hetchy Water and Power Enterprise	92,884	93,301	124,306	113,619	181,092	594,083	1,199,285	
Subtotal	791,821	621,150	1,063,674	1,187,738	1,208,850	3,257,030	8,130,263	
TOTAL	919,968	721,526	1,171,125	1,315,491	1,323,370	4,056,477	9,507,957	1,981,842
REVENUES								
General Fund	62,988	69,279	73,387	77,366	81,500	496,819	861,339	
Other Local Sources	2,009	4,333	4,222	4,320	4,423	22,168	41,474	
Prop K Funding	7,785	6,436	7,162	7,395	7,300	40,712	76,791	
State	18,611	19,121	19,437	19,759	20,089	105,628	202,845	
Federal	36,554	1,207	3,244	18,913	1,207	6,037	67,162	
Transportation Bond	-	-	-	-	-	128,082	128,082	
SFPUC Revenues	791,821	621,150	1,063,674	1,187,738	1,208,850	3,257,030	8,130,263	
TOTAL	919,968	721,526	1,171,125	1,315,491	1,323,370	4,056,477	9,507,957	
<i>Total San Francisco Jobs/Year</i>	<i>7,691</i>	<i>6,032</i>	<i>9,791</i>	<i>10,998</i>	<i>11,063</i>	<i>6,683</i>	<i>52,258</i>	

Departmental Breakdown Streets & Rights-of-Way

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	136,364	100,707	105,378	124,135	109,541	637,597	1,213,722	
SPENDING PLAN								
Current backlog - Roads								614,872
Street Resurfacing and Reconstruction	68,182	73,284	76,969	80,420	84,601	480,012	873,509	-
Curb Ramps (ADA Right-of-Way Transition Plan)	6,192	6,500	6,824	7,163	7,518	36,929	71,126	-
Sidewalk Improvements and Repair Program	7,095	7,438	7,796	8,173	8,479	46,384	85,366	-
Street Structure Repair	37,931	2,596	4,742	20,611	3,010	38,468	107,357	-
Street Tree Planting, Establishment, and Maintenance (Continued Reinquishment Scenario)	5,864	7,388	7,447	7,497	6,556	24,352	59,144	-
Plaza Inspection and Repair Program	619	596	708	805	810	4,568	8,103	-
Curb Ramp Inspection and Replacement	269	296	256	305	260	2,068	3,453	-
Landscape Maintenance	1,994	2,270	2,681	2,760	3,285	28,542	41,552	-
Transportation Bond Improvements (2024)	-	-	-	-	-	128,082	128,082	-
Streetscape Improvement Program	-	-	-	-	-	-	-	450,552
Utility Undergrounding	-	-	-	-	-	-	-	1,286,906
Bayview Transportation Improvements	-	-	-	-	-	52,287	-	52,287
Coordinated Safety Improvements	-	-	-	-	-	-	-	48,474
Market Street Plaza Enhancements	-	-	-	-	-	-	-	122,246
Jefferson Street Streetscape Enhancement Project, Phase 2	-	-	-	-	-	-	-	21,377
TOTAL	128,147	100,376	107,451	127,753	114,520	799,447	1,377,694	2,596,714
REVENUES								
General Fund	62,988	69,279	73,387	77,366	81,500	486,819	861,339	
Federal	36,554	1,207	3,244	18,913	1,207	6,037	67,162	
Other Local Sources	2,009	4,333	4,222	4,320	4,423	22,168	41,474	
Prop K Funding	7,785	6,436	7,162	7,395	7,300	40,712	76,791	
State	18,811	19,121	19,437	19,759	20,089	105,628	202,845	
Transportation Bond	-	-	-	-	-	128,082	128,082	
TOTAL	128,147	100,376	107,451	127,753	114,520	799,447	1,377,694	
<i>Total San Francisco Jobs/Year</i>	<i>1,071</i>	<i>839</i>	<i>898</i>	<i>1,068</i>	<i>957</i>	<i>6,683</i>	<i>11,516</i>	

SFPUC: Water Enterprise

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN								DEFERRED
Regional Costs								
Water Treatment Program	5,272	5,122	2,389	1,894	1,901	9,894	26,272	
Water Transmission Program	18,551	14,781	10,665	57,285	51,985	42,206	195,473	
Water Supply & Storage Program	1,894	1,739	1,949	2,810	17,832	228,274	254,288	
Watersheds & Land Management	1,050	1,504	1,504	1,504	1,504	8,716	15,782	
Communication & Monitoring Program	3,063	939	544	500	500	2,530	8,076	
Buildings & Grounds Programs	28,119	5,165	4,943	786	795	4,182	43,990	
WSIP Augmentation - Regional	40,000	13,222	-	-	-	-	53,222	
Regional Subtotal	97,749	42,472	21,994	64,779	74,517	295,602	597,113	
Local Costs								
Water Conveyance / Distribution System	48,700	53,700	54,700	54,700	54,700	252,500	519,000	
Buildings & Grounds Improvements	2,425	10,525	725	500	500	2,500	17,175	
Pacific Rod & Gun Club Remediation Project	155	-	-	-	-	-	155	
Systems Monitoring & Control	5,900	5,800	-	-	-	-	11,700	
Water Storage Facilities/Pump Stations	3,448	1,588	19,149	1,360	-	-	25,525	
Other Recycled Water Projects - Local	3,925	-	-	-	-	-	3,925	
WSIP Augmentation - Local	-	26,860	7,373	5,500	272	-	40,005	
Treasure Island Capital Upgrades	-	-	3,000	-	-	-	3,000	
Local Subtotal	64,553	98,453	84,947	62,060	55,472	255,000	620,485	
Auxiliary Water System								
TOTAL	162,302	140,925	106,941	126,839	129,989	550,602	1,217,598	
<i>(see SFPUC financial table in Public Safety chapter)</i>								
REVENUES								
Water Revenue- Current	37,484	18,341	18,952	71,804	76,804	239,032	462,417	
Water Revenue - Bonds	121,818	121,584	86,989	54,035	52,185	306,571	743,182	
Capacity Fee	3,000	1,000	1,000	1,000	1,000	5,000	12,000	
TOTAL	162,302	140,925	106,941	126,839	129,989	550,602	1,217,598	
Total San Francisco Jobs/Year	1,357	1,178	894	1,060	1,087	4,603	10,179	

SFPUC: Wastewater Enterprise

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN								DEFERRED
Sewer System Improvement Program								
Program Wide Management	24,000	23,000	22,000	19,000	19,000	90,000	197,000	
Land Reuse (candidate)	29,253	43,500	10,000	-	-	-	82,753	
Treatment Facilities	270,861	156,590	633,410	572,110	215,760	641,100	2,489,831	
Sewer/Collection System	74,500	62,416	58,971	216,223	536,801	761,054	1,709,995	
Stormwater Management/Flood Control	23,670	5,060	4,300	8,340	6,940	100,940	149,250	
SSIP Subtotal	422,284	290,566	726,681	815,673	778,501	1,553,094	4,528,799	
Renewal & Replacement								
Collection System - Condition Assessment	3,725	3,761	3,327	-	-	-	10,833	
Collection System - Sewer Improvements	54,338	56,240	58,209	80,246	62,354	330,540	621,927	
Collection System - Spot Sewer	19,925	20,622	21,345	11,000	11,000	60,530	144,422	
Treatment Plant Improvements	13,063	13,715	14,402	15,121	15,878	92,127	164,306	
Renewal & Replacement Subtotal	91,051	94,358	97,283	86,367	89,232	483,197	941,488	
Treasure Island	-	-	2,463	41,240	24,036	36,054	103,753	
Wastewater Facilities & Infrastructure								
Collection System Division Consolidation	20,000	-	-	-	-	-	20,000	
Ocean Beach Protection	3,300	2,000	4,000	4,000	6,000	-	19,300	
Southeast Community Center Improvements	-	-	-	-	-	-	-	
Wastewater Facilities & Infrastructure Subtotal	23,300	2,000	4,000	4,000	6,000	-	39,300	
TOTAL	536,635	386,924	832,427	947,280	897,769	2,112,345	5,713,380	
REVENUES								
Wastewater Revenue Bonds	482,635	341,424	784,927	896,780	845,269	1,810,787	5,161,822	
Wastewater Revenue	41,000	43,000	45,000	48,000	50,000	289,058	516,058	
Capacity Fee	13,000	2,500	2,500	2,500	2,500	12,500	35,500	
TOTAL	536,635	386,924	832,427	947,280	897,769	2,112,345	5,713,380	
Total San Francisco Jobs/Year	4,486	3,235	6,959	7,919	7,505	17,659	47,764	

SFPUC: Hetch Hetchy Water and Power

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN								
Hetchy Power								DEFERRED
Streetslights	11,946	5,734	5,734	5,710	5,710	21,356	56,190	
Transmission/Distribution	1,250	-	-	-	-	-	1,250	
Renewable/Generation	6,200	3,200	3,200	1,200	1,200	6,000	21,000	
Energy Efficiency	1,000	1,000	1,000	1,000	1,000	5,000	10,000	
Treasure Island & Other Development	2,950	9,600	8,950	7,100	2,100	4,200	34,900	
Reclassification -Power Only Joint Projects	51,581	47,191	65,659	61,671	96,678	313,720	636,499	
Hetchy Power Subtotal	74,927	66,725	84,543	76,681	106,688	350,276	759,839	
Hetchy Water								
Water Infrastructure	2,000	8,600	8,600	8,600	8,600	43,002	79,402	
Power Infrastructure	32,078	25,220	27,570	27,035	16,250	68,292	196,445	
Joint Projects - Water Infrastructure 45%	15,957	17,978	31,163	28,338	66,804	200,805	380,044	
Joint Projects - Power Infrastructure 55%	19,503	21,971	38,089	34,636	80,428	246,428	440,054	
Reclassification -Power Only Joint Projects	(51,581)	(47,191)	(65,659)	(61,671)	(96,678)	(313,720)	(636,499)	
Hetchy Water Subtotal	17,957	26,576	39,763	36,938	74,404	243,807	439,446	
TOTAL	92,884	93,301	124,306	113,619	181,092	594,083	1,199,285	

REVENUES

Power Bonds-55% Joint Assets (Moccasin Facilities only)	55,873	45,000	45,000	45,000	60,000	299,053	549,926	
Water Bonds-Water Only & 45% Joint Assets	17,957	26,576	39,763	36,938	74,404	243,807	439,446	
Cap and Trade Auction Revenue	1,700	2,025	2,390	2,804	3,014	-	11,933	
Revenue	17,354	19,700	37,162	28,876	43,673	51,223	197,960	
TOTAL	92,884	93,301	124,306	113,619	181,092	594,083	1,199,285	
Total San Francisco Jobs/Year	777	760	1,039	950	1,514	4,967	10,026	

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Overview & Accomplishments

The San Francisco Municipal Transportation Agency (SFMTA) manages all ground transportation in the city. This includes operating the San Francisco Municipal Railway (Muni), managing parking and traffic, facilitating bicycling and walking, regulating taxis, and planning and implementing strategic, community-based projects to improve the transportation network and prepare for the future.

The SFMTA recently completed a number of projects that will improve the transportation network by providing people with better travel options and making it safer, faster, and more efficient to get around. These include:

- Phase 1 of the Bay Area Bike Share program that makes it easier for people access a bicycle,
- Phase 2 of the Capital Program Controls System to improve project management,
- Phase 2 of the Fell & Oak Bicycleway that improves safety and comfort for bicyclists,
- Flywheel Electronic Taxi Access System that allows taxi customers to request a taxi using their smartphone,
- Market & Haight Transit and Pedestrian Improvements to reduce travel time on Muni and improve pedestrian safety,
- City College Terminal and Unity Plaza that will provide a safer and more convenient pedestrian link between Muni, the City College campus, and a below-market-rate housing development,
- Muni Metro Turnback Rail Rehabilitation to improve Muni light rail reliability, and
- Polk Street Multimodal Improvements that improves access to the neighborhood and safety for users of all modes.

The San Francisco Municipal Transportation Agency (SFMTA) has a number of short-term and long-term processes in place to identify and prioritize its capital projects.

The agency develops a fiscally unconstrained Capital Plan to identify needs for projects and programs over a 20-year horizon, and a fiscally constrained five-year Capital Improvement Program (CIP) to assign funding to a project. Both documents are approved by the SFMTA Board and have guided the development of this plan.

A number of other efforts inform the development of the SFMTA's Capital Plan, CIP, and this Citywide Capital Plan. These include the agency's Strategic Plan, the Transit Fleet Management Plan, the 20-year Short Range Transit Plan, the City's Transportation 2030 transportation infrastructure investment program, Plan Bay Area, a federally required plan for the Central Subway New Starts Criteria Report, and an Asset Management Program under development.

Together with a number of new efforts to improve the identification and prioritization of capital needs, these efforts have resulted in a systematic prioritization of capital projects and programs planned for the next 20 years. These capital projects cover all modes of transportation under the purview of SFMTA. To manage the capital needs of such a broad and complex transportation system, SFMTA's Capital Plan is organized into the following 15 programs:

Accessibility. This program seeks to meet or exceed Americans with Disabilities Act requirements and improve access to the transportation system and city destinations for users of all modes.

Bicycle. This program includes completion of the Bicycle Plan (2009), development of new bike strategies, bike parking, bike sharing, bike boulevards, cycletracks and other bicycle facilities.

Central Subway. This project is primarily funded with the federal New Start Program for the



Muni is the largest public transportation system in the region (based on ridership), the eighth-largest in the United States and one of the most diverse in the world.

Phase 2 extension of the T Third Street line.

Facility. This program addresses buildings, yards, transit stations, and other agency facilities.

Fleet. This program focuses on revenue and non-revenue vehicles that must be replaced and regularly overhauled, as well as expansion needs.

Information Technology/Communication. This program addresses systems that are critical to agency operational efficiency.



Transit Traffic Optimization

Parking. This program focuses on rehabilitation and improvement of the 19 SFMTA-owned parking garages as well as all 28,000 on-street metered spaces and 19 metered parking lots.

Pedestrian. This program includes investments in pedestrian safety features, bulbouts, and crosswalks.

School. This program focuses on the ways children can safely access their school by walking, transit, and bicycling.

Security. This program includes the security of critical equipment, data, operations and public protection from potential dangers.

Taxi. This program provides for regulation of the city's taxi industry and programs for electric vehicles, improved signing and messaging and real time information for taxi patrons.

Traffic Calming. This program includes the neighborhood and arterial traffic calming programs that ensure that vehicle speed and street treatments are appropriate for specific urban settings throughout the city.

Traffic/Signals. This program addresses vehicular operations, congestion management, multimodal signal timing and traffic safety measures.

Transit Fixed Guideway. This program focuses on rail lines, overhead wires for electric trolley coaches, and all guideways needed for light rail, historic streetcar, cable car and trolley coach services.

Transit Optimization/Expansion. This program includes Muni Forward, transit operational improvements and key enhancements such as the Bus Rapid Transit projects.

SFMTA 20-Year Capital Plan

The current SFMTA Capital Plan was adopted by the SFMTA Board in October 2013. The Capital Plan is the catalogue of the SFMTA's anticipated capital needs for the upcoming 20 years. It is a financially unconstrained plan and includes capital project needs for which funding has not yet been committed. The purpose of the plan is to identify the agency's capital investment needs and establish which investments are the highest priorities for the agency. The Capital Plan is updated every two years.

In total, the 20-year Capital Plan includes 99 projects or programs totaling \$15.7 billion dollars in needs, which includes all potential SFMTA capital investments. This latest capital plan is lower than the previous \$24 billion 2010 Capital Plan, which is primarily due to the evolution of asset management, funding of major projects such as the Central Subway, recent reorganization of capital programs, and updated cost estimates.

The Capital Plan is overseen by an agency-wide Transportation Capital Committee (TCC), which is comprised of representatives from each of the SFMTA's 15 capital program areas and all of the agency's functional divisions. The TCC approves all additions or amendments to the financially unconstrained Capital Plan.

Consideration of projects for inclusion in the Capital Plan follows a formal process starting with submitting a Capital Need Request form. Projects included in the Capital Plan are then prioritized based on criteria developed and approved by the SFMTA Director of Transportation and division directors. The capital project prioritization criteria (and their respective weights) are based on the four goals identified in the agency's FY2013-2018 Strategic Plan:

1. Create a safer transportation experience for everyone (41%),
2. Make transit, walking, bicycling, taxi, and carsharing the preferred means of travel (35%),
3. Improve the environment and quality of life in San Francisco (13%)
4. Create a workplace that delivers outstanding service (11%)

For more information on the SFMTA Capital Plan, see http://www.sfmta.com/sites/default/files/SFMTA%202013%20-%202032%20Capital%20Plan_.pdf

SFMTA 5-Year Capital Improvement Program

The Capital Improvement Program (CIP) is a fiscally constrained program of projects that the SFMTA plans to implement over the next five years. The CIP is constrained by forecasts for reasonably foreseeable revenues, and to be included in the CIP a project needs to show a plan to cover at least 90% of anticipated costs by phase. The SFMTA's FY2015-2019 CIP contains planned investments totaling \$3.3 billion, representing a 34% growth from the previous FY2013-2017 CIP. This is in part a result of the inclusion of the \$500 million general obligation bond passed by San Francisco voters in November (Proposition A). The general obligation bond funds a number of state of good repair and enhancement needs in the following capital programs:

- **Bicycle.** The bond will help build "Complete Streets" that enable safe, convenient, and comfortable travel for all users, including safer, well-defined bikeways.
- **Facility.** This program seeks to fix obsolete Muni facilities to create productive working conditions and improve vehicle maintenance.
- **Pedestrian.** Pedestrian safety will be improved through focused engineering efforts at high-injury locations.
- **Transit Optimization & Expansion.** A number of investments will be made to develop critical projects along key transit corridors, provide faster and more reliable transit, and improve safety and accessibility at transit stops.



MUNI Bus Fleet

A project must be included in the Capital Plan to be eligible for inclusion in the fiscally constrained five-year Capital Improvement Program (CIP). For a project to be incorporated into the five-year CIP, a Capital Funding Request form is submitted which includes a project description, schedule and budget. The first two years of the five-year CIP are adopted as the agency's two-year Capital Budget. The policies that govern the TCC, Capital Plan and CIP are designed to streamline previous processes and ensure that agency staff, the Board, and the agency's stakeholders have a clear understanding of the transparent decision-making process used to determine the agency's capital priorities.

For more information on the SFMTA Capital Improvement Program, see <http://www.sfmta.com>

The SFMTA also recently implemented an internal Project Integration Process that is intended to better ensure that the SFMTA coordinates project delivery and implements Complete Streets

projects where all modes are considered. The Project Integration Process relies on an internal committee of technical experts representing all capital programs. The committee reviews each project at an early planning phase and identifies integration opportunities. Agency staff then consider modifying project scopes while weighing budget and timeline implications. The SFMTA implemented this process in late 2014 and will refine the process as necessary.

Ten-Year Outlook

Over the next ten years, the SFMTA's total unconstrained capital need is \$9.0 billion dollars (this includes a five percent cost escalation rate assumed in this citywide plan). The largest programs in the Capital Plan include Transit Optimization (34%), Fleet (26%), Fixed Guideway (13%), and Facility (11%). Planned capital needs are split between maintain (52%), enhance (20%), and expand (28%).

The SFMTA projected capital revenues for next 10 years are \$3.8 billion dollars, leaving a projected capital shortfall of about \$5.2 billion dollars over this same period. Capital funding comes primarily from local (48%) and federal (47%) sources, with the remaining coming from state sources (5%).

The SFMTA and the City and County of San Francisco have undertaken a number of strategies to address the projected budget shortfall. The Mayor's Transportation Task Force found that to meet current needs and projected future demand the city needs to invest \$10 billion in transportation infrastructure through 2030. The Task Force recommended issuing two \$500 million general obligation bonds, restoring the state vehicle license fee to 2%, and implementing a half-cent sales tax dedicated to transportation. The first of the two general obligation bonds was approved by voters in 2014, and will fund a number of projects to build a more reliable Muni and safer streets for all. If additional revenues fail to be generated over the coming years, some projects will need to be deferred beyond the 10-year horizon of this plan.

1. Renewal Program

The SFMTA has been developing a Transportation Asset Management Program to better maintain the agency's assets in a State of Good Repair (SGR). The program is also being implemented alongside Federal Transit Administration (FTA) regulations and efforts under development to improve asset management nationwide. As part of the program, the SFMTA seeks to utilize principles of long-term capital asset management to optimize the long-term health and performance of the City's transportation system.

In 2010, the SFMTA developed a capital asset inventory that documented over 3,600 asset line items that included each asset's useful life, year in service, and estimated replacement cost. The information collected was then used to produce a SGR report in accordance with FTA requirements. In 2014, the SFMTA updated the inventory to add assets, refine cost estimates, and reflect the completion of capital projects (such as rail replacement, facility rehabilitation, and fleet replacements). The SFMTA estimates the total replacement value of all assets to be \$13.2 billion. Based on the current inventory and scheduled useful lives of each asset, the SFMTA also estimates a backlog of \$2.5 billion. The SFMTA has also classified needs by those that are transit-service critical, which represent the most essential investments in renewal the agency needs to make.

A key element of the agency's Asset Management Program is implementing an Enterprise Asset Management System (EAMS). The EAMS will facilitate the development of a more detailed and complete inventory on all of the agency's multi-modal assets, and enable agency wide asset tracking, work management, and materials management. The EAMS will be integrated with a standardized asset management practice across the agency, which will enable ongoing and more precise asset condition assessments as well as capturing all lifecycle costs associated with each asset. These improvements will support asset renewal/replacement programs and allow better financial forecasting and planning. The agency has recently begun implementing the



Light rail vehicle maintenance facility

EAMS and expects to be complete in 2017. The agency will also develop a Transportation Asset Management plan in coordination with upcoming FTA requirements that will guide the implementation of the EAMS, set performance targets, and tie asset management principles to the agency's strategic goals. In the long term, this will provide better information that the SFMTA can use to optimize its investments.

In the short term, SFMTA has already begun to establish a greater focus of its capital planning efforts on ensuring that current assets receive needed maintenance, rehabilitation, and replacement. The following projects and programs describe these initiatives:

Fleet Replacement. SFMTA's current fleet of motor coaches will have reached the end of their FTA defined useful lifespan and will be eligible for retirement over the next five years, making this replacement critical to the continuation of reliable transit operations. Over the next five years, much of the motor coach fleet will be replaced as part of a multi-year contract to phase out the SFMTA's fleet of diesel motor coaches that will have reached retirement age. The SFMTA will utilize a multi-year contract to replace 124 60-foot motor coaches and 261 40-foot motor coaches. Additionally, the SFMTA plans to replace 93 60-foot trolley coaches and 175 40-foot trolley coaches as part of a multi-year joint procurement contract with King County Metro. These coaches will have reached the end of their FTA lifespan and will be eligible for replacement. The contract will also allow for purchase of 12 larger capacity 60-foot trolley coaches in place of a number of 40-foot trolley coaches. In September 2014, the SFMTA also signed a contract to procure up to 260 new light rail vehicles. This includes a base order of 175 cars for a total of \$648 million, with an option to acquire up to 85 more. The SFMTA is also evaluating clean vehicle technologies for the parking control officers and taxi fleets, as well as a biofuel pilot for non-revenue service vehicles to further reduce fuel use and emissions associated with the transportation system.

Mid-Life Vehicle Overhaul Program. Investing in overhauls around halfway through a vehicle's useful life helps to improve the reliability of transit service by reducing the number and frequency of breakdowns. Traditionally, SFMTA has not been able to fully fund mid-life overhauls despite high ridership, challenging terrain, and long duty cycles, resulting in frequent breakdowns, costly vehicle repairs and disruption of transit service. In the FY2015–2019 CIP, the SFMTA has set aside a funding reserve of \$11.5 million for midlife overhauls for all vehicle types which will help the SFMTA to improve service reliability. As funds are identified and assessments of the vehicles are made, the SFMTA will schedule more of these rehabilitations as needed.

Traffic Signal Replacement Projects. Signal safety upgrades such as pedestrian countdown signals and enhanced signal visibility are key to meeting San Francisco's Vision Zero goals. This program provides for the replacement and upgrade of the deteriorated or obsolete signal hardware for over 1,200 signalized intersections. This initiative also includes installing new transit signal priority equipment citywide to minimize transit delay.

Parking Facilities Restoration & Compliance. The Agency manages 38 off-street parking facilities that provide nearly 15,000 parking spaces, 90,000 square feet of retail space and generate over \$85 million in annual gross revenues. Many of these facilities were built over 50 years ago and are in need of major rehabilitation and equipment upgrades. The SFMTA's Revenue Bonds and supplementary operating funds will infuse over \$47 million into this program. The overall program includes structural/seismic upgrades, energy efficient lighting, mechanical system upgrades (e.g. elevators, HVAC, sump pumps), revenue control systems, CCTV surveillance systems, elevator modernization, bike parking as well as compliance with ADA regulations and various Planning, Building and Fire Codes. The total project cost is \$75 million. Phase I, funded by \$35 million from the revenue bonds and \$12 million from operating funds, will implement high priority projects at 18 parking garages. Phase II, estimated at \$23.8 million, will complete the remaining projects at the garages and lots (funding source TBD). When completed, this program will extend the useful life of these major revenue-generating assets, enhance safety of these public facilities, as well as help provide better services for those



Future Central Subway Stops

using cleaner transportation alternatives such as bicycling, carpooling and carsharing.

Transit Fixed Guideway Program. The Muni Fixed Guideway program covers a broad spectrum of rehabilitation, reconstruction, and replacement projects for track, overhead catenary system (OCS), and train control systems that keep trolley bus, light rail, historic streetcar, and cable car operations safe and reliable. Projects planned for the next five years include investments in new track switching systems at 16 locations throughout the city; track repairs on the L-Taraval Line, the F-Market/Wharves line, the M-Oceanview Line at 19th Ave and Rossmoor; replacing track, OCS, and other systems in the Sunset Tunnel, rehabilitating track in the Twin Peaks Tunnel, and overhead wire replacement on the 33 Stanyan route. The SFMTA also plans to purchase approximately \$2 million in Advanced Train Control System equipment including axle counters, cable, and electronic boards. These components currently have upwards of 15 years of service and are due to be replaced.

Blue Light Phone System Replacement. New blue light emergency phones will allow operators to reach Central Control, traction power and other stations or the local fire department in emergency situations. The current phone system was installed in the early 1980's with a stated useful life of 20-25 years, and is therefore overdue for replacement. Due to the age of the system significant resources are currently required to keep the system operational. The SFMTA will replace the blue light phone system in the Muni Metro, Sunset, and Twin Peaks Tunnels with a \$13 million system that will provide updated phone switchers, call stations with phone set and bluelight indication, emergency backup electrical power supply wiring infrastructure, and telecommunication wiring instructions.

Facilities. One of the agency's greatest needs is resources to keep its facilities in a state of good repair; efficient and well-functioning maintenance facilities are vital to ensuring that the SFMTA can provide transit service and maintain the City's transportation network. In 2013, the SFMTA completed its Real Estate and Facilities Vision for the 21st Century Report (Vision Report). The Vision Report summarizes the comprehensive assessment of the agency's current facilities and land leases to identify opportunities for operational efficiency, potential cost savings, and alternative revenue streams. Rather than focusing exclusively on the acquisition of additional real estate to accommodate projected fleet needs, the report aimed to first look within the agency to find ways to reconfigure, consolidate, or expand existing facilities to best meet operational needs, while identifying cost savings and revenue opportunities.

Upcoming work includes investing over \$3 million to replace the air exhaust system and roof at the Bancroft facility (that houses the meter, sign, paint, and temporary sign shops), and about \$1.8 million to replace the existing life and fire safety systems at the Flynn, Kirkland, Scott, Metro Green and Potrero Facilities. However, much additional needed facility work remains unfunded.

Subway Elevator Rehabilitation. Safe and reliable elevators are key to providing everyone access to the SFMTA's subway stations. The SFMTA will invest about \$2.5 million to rehabilitate the street and platform elevators at the Church and Castro subway stations. This includes the installation of new cabs, doors with glass panels, door operators, hydraulics, controllers, and cameras for the elevators serving the stations. This effort will improve elevator reliability and ensure consistent access to the station for people with disabilities.

2. Enhancement Program (FY2016 - FY2019)

Major capital projects that will expand or enhance current assets and the current level of service include:

Central Subway (Third Street Light Rail Phase 2). The Central Subway is the highest priority transit project for San Francisco and the single largest capital project in the SFMTA Capital Plan. It consists of a 1.7 mile extension of the existing Third Street light rail line to Chinatown, beginning with surface rail north from King Street along Fourth Street and continuing in subway under Fourth Street north of Bryant Street. In early 2010, utility relocation began along the route with tunnel construction due to commence in early 2013. In October 2012, the SFMTA and FTA reached a Full Funding Grant Agreement, which finalized the funding and financing of the Central Subway Project. Two tunnel boring

machines began constructing the two subway tunnels in 2013 and successfully completed work in 2014. Construction has also begun on building the Central Subway's three subway stations, one surface-level station, train tracks and operating systems. The Central Subway is on track to open to the public by 2019.

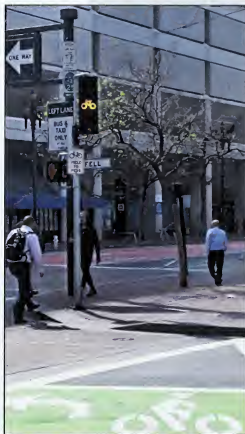
Projects Supporting Vision Zero. The SFMTA Board has committed to the Vision Zero policy goal of eliminating traffic-related fatalities by 2024. Sixty percent of pedestrian collisions occur on only six percent of the streets in San Francisco. Similar trends have been identified for bicyclist and motorist collisions. The city is prioritizing safety treatments along these high injury corridors and at high injury intersections as well as systemically for select treatments to improve safety citywide as efficiently as possible. The SFMTA has identified 40 projects as Vision Zero priorities, at least 24 of which will be completed within two years. These projects span across the pedestrian, bicycle, traffic calming, and traffic & signals capital programs. Projects expected to be completed in the next few years include: Potrero Ave streetscape project including dedicated transit lanes, sidewalk widening, buffers for existing bike lanes, and bulbs; conversion of Ellis and Eddy Streets to two-way traffic streets (including installation of pedestrian signals at Ellis/Taylor and Eddy/Taylor); and pedestrian bulbs, bus bulbs, and a new traffic signal along Irving Street between Arguello and 9th Ave.



Potrero St. bike lane enhancement

These first 40 projects are among many more to be implemented in the next two years, and hundreds in the next ten years, but were highlighted to represent the range of treatments that can be implemented. The SFMTA is finalizing high injury corridor maps that address severe/fatal injuries for all transportation modes that will inform the prioritization of future Vision Zero initiatives. The SFMTA will also continue to monitor and analyze data to evaluate the efficacy of Vision Zero efforts and refine as necessary.

Muni Forward. The Transit Effectiveness Project (TEP) was the first comprehensive review of San Francisco's transit system in more than 25 years. The TEP was an in-depth planning process supported by data, engagement with the community at various levels, and critical lessons learned through the implementation of pilot projects. Informed by this study, the SFMTA developed a program of projects called Muni Forward – route changes, service improvements, and comfort and safety enhancements – that will improve the transit system, enable the agency to meet its service standards and goals, and reallocate limited resources where they are needed most. This will improve the quality and reliability of transit service, as well as enhance safety and access for all customers, including those with disabilities.



Bike Traffic signals

The Muni Forward proposals were initially developed in 2008 during the planning phase of the project; however, staff re-evaluated and refined them as part of the development of the TEP Environmental Impact Report Project Description in order to capture more recent land use and ridership trends, as well as integrate service changes that were implemented in 2009 and 2010. The final proposals include Creation of a new Service Policy Framework that reorganizes Muni service into four transit categories (Rapid, Grid, Circulators, Specialized); Implementation of service changes to reduce crowding, improve system-wide neighborhood connectivity and access to regional transit, and redirect finite resources to where they are needed most, and Prioritization of Transit Capital Improvements—engineering improvements known as Travel Time Reduction Proposals (TTRPs)—designed to address transit delay, improve reliability, and increase the safety and comfort of customers along the most heavily used Rapid routes. As part of the TEP, detailed proposals were developed for eleven corridors and conceptual proposals were developed for another six corridors.

In 2014, the SFMTA Board of Directors approved the majority of these proposals, including an overall 12 percent service increase. As a continuation of these efforts, SFMTA has initiated the Muni Forward program to implement the proposals approved in the TEP.



MUNI Rail Yard

Van Ness Bus Rapid Transit (BRT). The Van Ness Bus Rapid Transit (BRT) project will be the first BRT service in San Francisco. Its main goal is to create efficient and more reliable transit service along the Van Ness Avenue corridor between Mission and Lombard streets. Other goals are to promote pedestrian safety and accessibility, enhance the urban design, and strengthen the identity of Van Ness Avenue. Van Ness BRT will improve transit reliability for the 47 and 49 Muni routes and provide reliable transit connections to transfer routes. Strengthening transit along this two-mile stretch of Van Ness will also positively affect the efficiency of connecting routes. The transit service and infrastructure changes are expected to reduce transit travel times by over 30 percent. By 2035, with the implementation of BRT, ridership is projected to be greater than 60,000 passengers per day. The Van Ness BRT project will cost about

\$185 million and is funded from a variety of sources including FTA Small Starts, Prop K funds, and developer contributions. In November 2014, the SFMTA Board approved the traffic engineering changes required for the project. The SFMTA plans to start construction in 2015 and plans to implement service in 2018.

Transportation Management Center and Radio Communication System. The new Transportation Management Center will allow the SFMTA to better respond to issues and manage transportation in the city. The Transportation Management Center consolidates and centralizes a number of functions including the Muni Operations Control Center, SFgo traffic management center, transit line management center, parking control dispatching, and security monitoring within a centralized command and control facility for all SFMTA functions. In addition, the radio communication system that is used to communicate with all of the SFMTA's transit vehicles is also being replaced. The Communication Systems Replacement will also add additional technology to the radio system, such as an Automatic Vehicle Location/Global Positioning System, to accommodate tracking schedule adherence expediting response to emergencies and road call requests, and collection of passenger data.

Islais Creek Motor Coach Maintenance Facility. The new Islais Creek facility will house and service motor coaches – including higher-capacity 60-foot articulated buses – that will support increased transit service, particularly on the Muni Rapid and Bus Rapid Transit routes. The \$130 million facility is being developed in two phases. Phase 1 was completed in the fall of 2012 with bus parking and fuel wash facilities. Phase 2 is in final design and will include the maintenance and operations facilities. The design is being modified to accommodate articulated buses, which will provide greater operational efficiency and flexibility. When Phase 2 is complete, the SFMTA will have the space necessary to redistribute its rubber-tire fleet to allow its other bus facilities to be modified, upgraded, or redeveloped.

The new 65,000 square foot motor coach maintenance and operations building will include light and heavy maintenance bays, warehouse space, operations and maintenance offices, showers, gilly room, locker rooms and training space. The project will need additional funding due to cost increases. These cost increases are due to price escalation, changes required to meet current building code, and changes to meet the city LEED building requirements.

Operator Convenience Facilities. The Operator Convenience Facility Project aims to provide accessible facilities to meet the health and safety needs of Muni operators throughout the City and reduce unplanned service interruptions. The project includes design for site specific elements such as utility connections, retaining walls and sidewalk bulb outs where required. It will also engage community members to get feedback on design and siting in concert with procuring necessary approvals and permits from City agencies required for installation. The SFMTA has planned, and received City approvals for new modular Operator Convenience Stations at up to 21 route terminals throughout the City.

Mission Bay Loop. The Mission Bay Loop will provide turn-around capabilities for the T Third and be able to accommodate the additional service needed when the Central Subway opens in 2019. The Loop was designed in 1998 as part of the Third Street Light Rail Project that was completed in 2003. However, due to budget constraints, construction of the Mission Bay Loop was deferred until 2013 when Central Subway was significantly under construction

and TIGER Grant funding was secured. The Mission Bay Loop will be constructed in the Central Waterfront area on city roads and rights-of-way on the block of 18th, Illinois, and 19th Streets. The existing trackway on 18th and 19th Streets between Third and Illinois Streets would be extended to Illinois Street to complete the Loop. The environmental review has been completed and construction is scheduled to start in 2015. Construction of the project is expected to take approximately one year, and will be complete in 2016 for a total estimated cost of \$6.2 million.

Metro East Light Rail Vehicle Facility. The Muni Metro East (MME) Facility is one of three facilities that support the agency's rail fleet. The SFMTA will implement a number of enhancements to the MME Facility. The agency will construct a new auxiliary building east of the existing MME Facility site at Illinois/Cesar Chavez Streets in San Francisco to house the Paint and Body Shop and Maintenance of Way functions. This building will be located in the 4 acre undeveloped area just east of the 13 acre developed MME area. The scope of construction will include yard and building work, including the mitigation of pollution, grading, trackwork, overhead catenary system, traction power, signals, paving, fencing and gates, perimeter security, stripping and signage. The scope will also include procurement, installation, testing/commissioning of equipment to be housed within the building, such as rail car spray paint booths, body hoist system, traveling manlifts, frame straightening equipment, two ton bridge crane and monorail as well as miscellaneous shop machinery, storage equipment, and workstations.

An additional project will purchase and install the equipment that would have been installed during the original construction had budget been available. Equipment will be installed for Unit Repair/Electric, Machine, Sheet Metal, Truck, Welding, Parts Cleaning, HVAC/Pantograph Repair, Signals and Communications. A third project will construct storage tracks and canopies at the existing MME facility to provide weather protection for the historic streetcar fleet. The work will include new ballast, ties, rail, and bumper stops, similar to the canopies at the Green Facility. This will also include relocating historic vehicles from the Marin facility. The total cost of the facility is about \$140 million.

Woods Division Upgrades. Woods Division is overcrowded and the facility needs added capacity to continue to support the agency's growing fleet of motor coaches. A renovation project will increase the repair capacity from 24 bays to 40 bays, without expanding the facility footprint. Additionally, three new hoists will be constructed for articulated buses at the Woods Division in three existing bays. This work will require raising the structural ceiling beams to accommodate lifted buses and widening the existing bus wash at Woods to accommodate articulated buses. Woods is currently designed to serve 40' and smaller coaches. Capacity to maintain 60' articulated coaches is needed because of the projected expansion of SFMTA fleet to include more 60' articulated buses. Reconfigured hoists and bays would allow for 60' coaches to be maintained at Woods, which addresses a major maintenance issue associated with fleet expansion.

Fleet Expansion. The transit fleet is projected to expand in order to serve the Central Subway and the service increases proposed under the Muni Forward initiative to meet growing demand. The SFMTA will expand its light rail fleet by 24 vehicles in order to serve the future Central Subway route. The new 1.7-mile extension of Muni's T Third Line will provide direct connections to major retail, sporting and cultural venues while efficiently transporting people to jobs, educational opportunities and other amenities throughout the city. In 2014, the City approved a contract to purchase up to 260 new LRVs, which includes a base contract of 175 cars for a total of \$648 million, with an option to acquire up to 85 more. The first new LRV is expected to arrive by the end of 2016, with 23 additional cars to be delivered by mid-2018 prior to the start of revenue service on the Central Subway.

The SFMTA will also purchase 62 new 60-foot articulated buses over the next five years. Articulated 60-foot buses are a cost-effective and efficient method of meeting ridership demands, as they have 1.5 times the capacity of standard 40-foot buses while only needing one driver and one vehicle.

SFpark and Parking Meter Modernization. The SFpark pilot concluded in 2013, and the

SFMTA's evaluation of the pilot showed that using new policies and technologies to manage parking made it easier and cheaper to park. Even as the economy, population and parking demand grew, parking availability improved dramatically in SFpark pilot areas. Improved availability led to other benefits as well — when parking is available, people rarely double-park or circle to find parking. Traffic flows better, greenhouse gas emissions decrease, and our streets are safer, with fewer distracted drivers.



Parking meter enhancement

Demand-responsive pricing has continued in the existing SFpark areas. To improve public parking in more of San Francisco, the SFMTA is developing a proposal for expanding the SFpark approach to other areas. The agency has already begun upgrading all 27,000 parking meters in San Francisco to new smart meters that are easier to use and accept multiple forms of payment including credit cards and PayByPhone. The new equipment costs about \$18 million.

Security Program. Developing state-of-the-art emergency security systems is crucial to providing San Francisco with a safe and reliable transportation system. Security Program funds are used to plan, design, and implement security initiatives in case of a natural disaster, terrorist attack, or other emergency situations. Upcoming projects include procurement of SaFE-D software that provides a system to optimize the schedule and frequency of enforcement patrols, and procurement of battery-powered Motorized Emergency Response Vehicles (MERVs) that run along rail tracks. Constructed of lightweight aluminum, MERVs are used by first responders and transportation safety specialists to respond to the scene of an emergency in the rail system quickly and efficiently.



Bike Sharing on Market St.

Bike Sharing. Bike sharing systems make it easier for people to manage to bicycle and connect from the start and/or end of their trip to transit. Bay Area Bike Share, a regional bike sharing pilot program, launched in San Francisco with 35 stations and 350 bikes in 2013. There were 282,000 rides taken in San Francisco in the first year. The pilot is operated by Alta Bike Share and funded through a multi-agency public partnership including regional agencies and cities along the peninsula. The SFMTA has committed \$2.2 million to implement Phase 1 of the Bike Share Expansion project, which will cover a portion of the labor costs (SFMTA staff and consultants) to support the expansion and ongoing operations of bicycle sharing to approximately 3,000 bikes and 300 stations.

Signals, signs, and ITS projects. A number of new signals and signs are scheduled to be added to San Francisco streets over the coming years. In addition, various Intelligent Transportation

System (ITS) projects are slated to be added, including traffic monitoring cameras, parking guidance signs, and transit signal priority,

Deferred Projects

The SFMTA currently has an estimated \$2.5 billion state of good repair backlog based on the scheduled life cycle of its existing assets. The SFMTA has calculated the impact of various investment scenarios on the SGR backlog and future needs over 20 years: \$571 million annually would eliminate the backlog and allow full scheduled replacement of assets as they reach the end of their useful lives; \$510 million annually would reduce the backlog by 50%, as well as allow full scheduled replacement of assets; \$450 million annually would meet all upcoming SGR needs with no growth in the backlog (i.e., backlog would not be reduced); \$305 million per year would meet all upcoming Transit Service Critical SGR needs, with some growth in backlog due to unmet other SGR needs.

Between 2010 and 2014, the agency has invested \$180 million annually on SGR needs. However, the current CIP provides for an average annual investment of \$315 million per year on SGR needs between FY2015-2019. These funds are primarily directed towards Transit Service Critical investments.

To date, the SFMTA has not had the financial resources to support more than day-to-day

operational maintenance. Vehicle overhauls are funded as resources allow rather than on a regular schedule. Simultaneously, increased population is leading to greater needs and improvement in the public realm, expanded and enhanced pedestrian and bicycle improvements in a constrained environment are resulting in significant cost increases, however these projects are not only critical to maintain quality of life, but to continually ensure that San Francisco streets remain safe. This is all occurring as funding, particularly federal and state resources, is declining, making local and regional funding more important to finance our capital and operational needs. Through the implementation of the Strategic Plan and improving project coordination internally and with other city departments, the SFMTA will target and make more efficient use of local funds.

The SFMTA continues to work on ensuring that its operating budget can support ongoing operating and maintenance needs of its capital projects. In addition, the SFMTA will be working with other city departments and our stakeholders to jointly identify opportunities to secure the necessary capital and operating resources to meet growing demand for sustainable transportation options such as transit, walking and bicycling.



Multi-modal transportation on Market Street

Mid-life Vehicle Overhauls. While the Mid-Life Vehicle Overhaul Program had started to dedicate funding to improve the reliability of the transit fleet, it is not sufficient to cover all needs. Motor coaches, trolley coaches, and light rail vehicles all require mid-life rebuilds to attain the required useful life and maintain adequate vehicle availability throughout that period. The total estimated cost for these fleets, deferred in the past and needs through the next 10 years, is approximately \$500 million. Funding priorities for federal transit capital dollars in the region do not give priority for midlife rebuilds, and funding availability is limited. The SFMTA recently funded mid-life overhauls of 80 40-foot hybrid diesel vehicles, but conditions of the funding source require that these vehicles extend their useful life. While important to implementing SFMTA's strategy to stagger transit fleet procurements with smaller quantities of vehicles purchased each year, there is currently no dedicated fund source for mid-life overhauls.

Bicycle Strategy. As the population of San Francisco grows and increases in density, traffic congestion will increase unless the City is thoughtful and efficient about the limited use of the public right-of-way. Currently, the existing bicycle network accommodates a 3.5% bicycle mode. SFMTA's Bicycle Strategy builds upon the 2009 Bicycle Plan and lays out key investments needed to promote cycling for everyday transportation. The Bicycle Strategy proposes investments to enhance and expand the bike network to accomplish the 20% bicycle mode share. As cycling becomes a more popular mode, it is important that the streets of San Francisco are safe and accessible for everyone. Additionally, the more people that use the system, the more it will need to be expanded. These projects would add to the bicycle network, upgrade intersections to improve circulation and safety, add bicycle facilities, and bike parking. While the SFMTA has identified a number of funding sources (including the general obligation bond) for investing in the City's bicycle infrastructure, a significant share of the total \$500 million need is unmet.

Facilities. Facilities are not considered Transit Service Critical since they are not as central to providing services as, for instance, vehicles and fixed guideway are. However, functioning facilities are the backbone to transit operations and maintaining the city's transportation network. Many of SFMTA's transit facilities require significant renovation to bring them up to modern standards. Additionally, outdated layouts and structures have led to serious constraints in the SFMTA's capacity for maintenance work and reliable service delivery. The SFMTA's 2013 Real Estate Vision established a plan and process to rehabilitate and reconfigure the SFMTA's existing facilities to optimize operations and accommodate future operating and fleet needs. Facilities lack a dedicated funding source, and many needs go unmet.

Traffic and Signals. Many of the city's traffic signals are aging and are in need of modernization. Newer signals are more easily coordinated and monitored, and less likely to fail, which can reduce congestion and improve transit travel times. New signals also include pedestrian countdown signals, which can improve pedestrian safety. Accessible pedestrian signals may also be included and are evaluated on a case by case basis. Only about 40 percent

3. Emerging Needs

In addition to the renewal and enhancement programs mentioned previously, there are a number of other efforts underway that will help the agency to better identify and plan for its capital needs. These efforts support the SFMTA's shift toward a sustainable mobility framework centered on providing greater access to transportation options to the private automobile, including transit, taxis, rideshare, carshare, walking and bicycling. Emerging needs include:

Geary Bus Rapid Transit (BRT). The Geary Bus Rapid Transit (BRT) Project is a coordinated set of transit and pedestrian improvements along the 6.5-mile Geary corridor between the Transbay Transit Center and 48th Avenue. Geary Boulevard is the most heavily used surface transit corridor in San Francisco. Over 50,000 daily transit trips rely on Geary bus service, but buses serving the corridor are often slow, unreliable and crowded. The Geary BRT project will improve bus travel times and reliability, improve pedestrian safety and access to transit, and enhance neighborhood livability and community vitality. The project is a partnership between the San Francisco County Transportation Authority (SFCTA), which is leading the environmental review, and the San Francisco Municipal Transportation Agency, which will lead the preliminary and detailed design phases and will be responsible for construction and operating the service. The Geary BRT Project is in its environmental review phase, which will culminate with publication of an Environmental Impact Report/Statement (EIR/S), a project approval and document certification action by the SFCTA Board, a project approval by the SFMTA Board, and an action by the FTA completing the federal environmental review requirements. The estimated project cost is \$328 million.

Geneva-Harney BRT. This project would develop Bus Rapid Transit along the Geneva Corridor and improve transit service in the southeast part of the City as well as to destinations in northern San Mateo County. The project includes BRT facility development along Geneva and Harney Way, supporting the Candlestick Point/Hunters Point Shipyard project and linking this developing area to Caltrain, BART, and the T-Third line. Along the route, vehicle conflicts will be minimized through traffic control. The SFCTA is currently conducting a feasibility study. The estimated project cost is \$55 million.

T Third Phase 3. In 2019, the T Third Central Subway project will be complete and rail service will be provided between the Caltrain Station at 4th and King and Chinatown. The SFMTA in partnership with the SFCTA and Planning Department recently completed a concept study for extending service from Chinatown to North Beach and Fisherman's Wharf. In this study, multiple alignments were examined and evaluated, and concluded that an extension is feasible and would carry ridership benefits. The study does not recommend a particular alignment, but the best scoring concepts were underground alignments. High level costs estimates range between one and two billion dollars.

F Line Extension. Extending the F Line historic streetcar from its current terminus at Fisherman's Wharf to the Fort Mason Center would improve local and regional transit connectivity for residents and visitors. The SFMTA studied this 0.85 mile extension in collaboration with the National Park Service (NPS) and the FTA. In 2013, the NPS received a Record of Decision for the final Environmental Impact Statement satisfying the federal environmental review under NEPA. The NPS stated that it would intend to authorize the SFMTA to construct, maintain, and operate the F Line extension on NPS lands, which allows the project to move forward. The project has also been determined to be Statutorily Exempt from CEQA. When a funding plan is established for the project the SFMTA can initiate the design process.

Rail Capacity Strategy. Ridership on Muni's rail network has reached capacity along numerous lines and within the Muni Metro Tunnel. Ridership demand is forecast to increase dramatically through 2040. SFMTA must remove bottlenecks, optimize delivery, and expand

service to meet this demand. The SFMTA is currently developing a Rail Capacity Strategy that will establish near, medium, and long-term investments that will optimize the capacity and performance of existing SFMTA rail assets, as well as identify corridors where forecasted ridership demand indicates the need for future rail service. This will lead to new capital projects that would enhance the current system and would require additional funding.

Planning for Sea Level Rise. The City is planning for the resilience of publicly-owned infrastructure assets in the face of sea level rise. As part of this effort, a Sea Level Rise Committee was formed to develop a citywide planning standard for sea level rise estimates and to draft guidance for incorporating sea level rise into capital planning. The SFMTA is currently developing a framework to incorporate this guidance and ensure that sea level rise is considered in its asset management and capital planning processes. For current and future assets, the SFMTA will determine appropriate sea level rise scenarios, assess vulnerability and risk, and plan for adaptation. Certain mitigation measures (e.g., flood proofing, raising grades) will add to the scope and budget of capital projects, and will likely require additional funding.

19th Avenue/M Ocean View Project. The 19th Avenue/M Ocean View Project is the byproduct of the 19th Avenue Transit Study and aims to improve service of all modes within the area and better serve key destinations such as San Francisco State University, Parkmerced and Stonestown Galleria. The study was approved in early 2014 and the SFMTA was charged with further planning of the project. The project calls for major capital investment to construct a light-rail tunnel under 19th Avenue between Saint Francis Circle and Parkmerced, a new track through Parkmerced, and a multimodal bridge connecting Junipero Serra Boulevard to the west of 19th Avenue with Randolph Street to the east. The project proposes completely redesigning 19th Avenue to add wider sidewalks, street greening, improved bus stop conditions, and an off-street bicycle path. Furthermore, the project benefits the capacity and reliability of the entire Muni Metro system. Project alternatives developed through community input and with the help of key stakeholders during the feasibility phase are now in the process of being further developed out to a level of detail that will allow for environmental review.

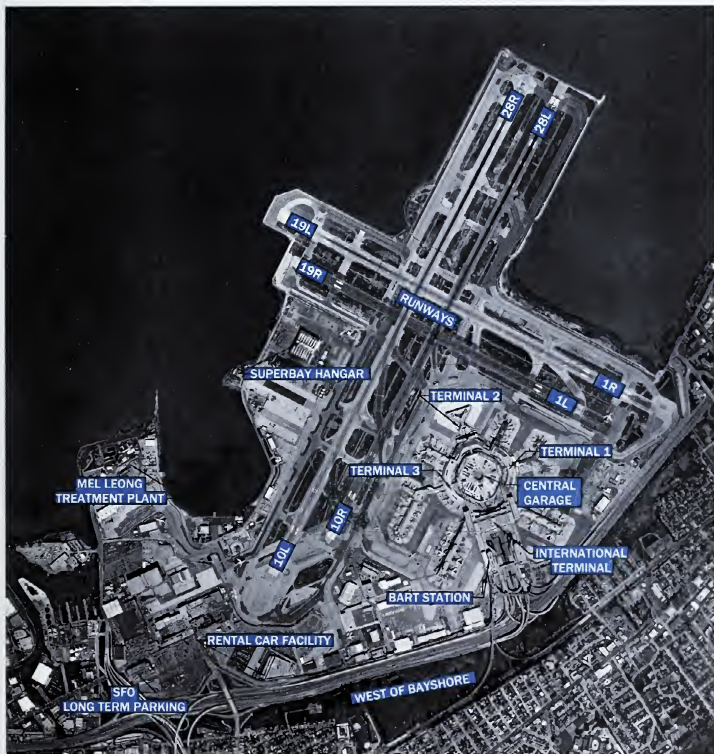
Urban Planning Initiatives. SFMTA is coordinating with other city departments and private developers to address the transportation needs of major growth projects including at Candlestick Point/Hunters Point Shipyard, Treasure Island, the northeastern waterfront area, Pier 70, Parkmerced, and the Warriors Arena. The SFMTA's UPI group is also positioned to engage as early as possible in other emerging City priorities.

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San Francisco International Airport

SFO

San Francisco International Airport



Overview & Accomplishments

Located within unincorporated San Mateo County, the San Francisco International Airport (SFO) has 2,203 acres of usable land, nearly all of which (2,186.5 acres) has been developed for Airport use. The Airport manages four runways, 88 operational gates and four terminal buildings in addition to 32 miles of roadways, five parking garages, the AirTrain transit service, a rental car facility, leased cargo and maintenance facilities, a waste treatment plant, and more than 274 miles of pipelines, ducts, power, and pump stations for water, sewage, storm drainage, industrial waste, gas, electrical, and telecommunications distribution systems.



Runway Safety Area (RSA)

The Airport continues to experience growth in passenger traffic. In FY 2014, 46.2 million passengers traveled through the Airport, which was 3.2% higher than FY 2013, and established a new peak for SFO. Passenger traffic has grown at a compound annual growth rate of 4.8% over the last five fiscal years.

In the last ten years (2004-2014), the total number of enplaned passengers (both domestic and international) has increased from 15.4 million to 23.0 million, an average increase of 4.9% per year. Even the most recent recession had minimal impact on enplaned passengers (a modest decrease of less than 1% in 2009). While the Airport is currently forecasting more modest growth going forward

(an average of 1.7% through 2021), it would still add nearly 3 million more enplaned passengers by 2021.

The growth in passenger traffic has resulted in a significant increase in parking, concession, and other non-airline revenues. In FY 2014, concession revenues, including revenues for parking, rental cars, and other ground transportation, were approximately \$166.6 million, a 3.3% increase compared to the prior year revenues of approximately \$161.2 million. The Airport's non-airline revenues are critical to meeting the projected capital needs and holding down cost per enplaned passenger, a metric that is used to compare airports.

Highlights and Accomplishments



New Terminal 2 Interior

The Airport is continuing to evaluate its facility needs in light of expanding demand for air travel and the aging of its existing infrastructure. Terminal 2 (T2), completed in 2011, demonstrated the value of enhancing the customer experience when renovating aging facilities. The modernized terminal not only allows for greater passenger throughput, but has resulted in higher passenger spending rates on concessions. As such, Terminal 2 has become the new design standard that the Airport plans to replicate as it renovates other terminals and support facilities to accommodate passenger growth.

In 2013, building on the success of T2, the Airport launched a new program, Revenue Enhancement and Customer Hospitality (REACH), to improve all aspects of the customer experience at SFO. The program is based on studies that demonstrate that superior customer experience can significantly increase non-airline revenue. The overall goals of the REACH Program are to achieve the highest customer satisfaction ratings, create

socially and ecologically sustainable business models, and become a top revenue generator nationally. The Airport is incorporating the REACH principles into all of its planning efforts and capital projects.

The Airport continued to apply these concepts with the January 2014 completion of a \$138 million renovation of Terminal 3 Boarding Area E. This project expanded the building's footprint and added concession space, consistent with the T2 standards and the REACH principles to enhance customer experience. Additionally, the Airport completed the \$12.0 million secure connector between Terminal 1 and Terminal 2 on November 4, 2014.

The Airport continues to deliver on other capital improvements. In 2014, the Airport completed the \$214.0 million Runway Safety Area (RSA) program, to comply with federally mandated safety enhancements of the runways. The

Airport also completed the new \$31.0 million West Field Cargo project in June 2014, which has approximately 60,000 sq. ft. of warehouse space and 13,000 sq. ft. of office space for additional cargo operations.

SFO Capital Plan

Each year, the Airport Commission reviews and updates the Airport Capital Plan, which includes both a five-year and a ten-year estimate of capital needs. As a result of the passenger traffic increases and efforts to improve the passenger experience for capital projects, the Airport plans to improve many of its terminals and other critical support facilities to accommodate the growth and enhance the customer experience. The preliminary Capital Plan presented here, subject to revisions based on further development, identifies capital needs of \$2.6 billion in the next five years, and \$4.6 billion over the ten-year period. These estimates are subject to revision and include a number of new projects or expanded project elements, including a major renovation of Terminal 1, an on-airport hotel, extension of the AirTrain, and a second long-term parking garage. The total projected capital expenditures, by the Airport's five cost centers and facilities maintenance projects, are summarized in the table below.

Cost Center	Five-Year CIP (in 000s)	Ten-Year CIP (in 000s)
Terminals	\$ 1,481.9	\$ 3,186.4
Groundside	424.3	449.2
Airport Support	272.4	275.4
Airfield	222.0	335.9
Utilities	148.9	170.2
Facilities Maintenance	65.5	137.5
Total Capital Uses	\$2,615.0	\$4,554.6

The Airport will continue to pursue the major efforts that were initiated in prior plans as well as continue to evaluate or plan for many other projects. Because of the strong passenger growth and increased airline operations, the Airport is carefully reviewing all capital project commitments to ensure it remains focused on meeting these demands, while providing exceptional capital projects with facilities designed to elevate the air travel experience.

Project Funding

Currently, the ten-year Capital and Facilities Maintenance Plan (Airport Plan) includes the following projected requirements:

- \$4.4 billion in capital improvement projects spanning the ten-year period.
- \$137.5 million in facilities maintenance projects to cover the cost of non-routine maintenance and repair projects over the next ten years. These needs are annually approved and funded as operating budget projects within the Facilities Division.
- \$7.5 million in deferred facility maintenance projects over the coming ten-year period. These items are assigned a less urgent priority and are separately identified from those in the renewal budget. Deferred maintenance items are typically re-categorized as facilities maintenance projects based upon regularly scheduled assessments for asset condition and remaining useful lives.

The Airport Plan identifies the following funding sources to meet the projected \$4.6 billion ten-year infrastructure needs:

- \$4.1 billion in Airport revenue bond funds

- \$223.4 million in federal and state grants
- \$188.7 million in operating funds
- \$47.0 million in passenger facility charge (PFC) revenue

1. Renewal Program

The Facilities Maintenance and the Design and Construction division uses the City's Facilities Resource Renewal Model (FRRM) to determine Airport facility maintenance requirements for buildings and uses other dedicated systems to assess asset renewal life cycles for airfield support structures, pavement infrastructure, and Airport utilities.

The Airport will need an estimated \$137.5 million for facilities maintenance and renewal projects over the next ten years. These repair and renewal projects are funded through each year's annual operating budget, while capital improvements are usually multi-year projects financed with capital funds. The \$137.5 million in funding does not include projects that are identified as deferred maintenance. The Airport has identified approximately \$7.5 million as unfunded deferred maintenance and this amount is shown in the accompanying financial projections as a funding shortfall. Deferred maintenance is categorized as projects that are temporarily delayed based upon Airport priorities and the availability of resources.



Runway Reconstruction

The Airport considers renewals to be general repair and replacement of building systems, such as a roof repair. Most of the projects at the Airport are enhancements, including runways, taxiways, and fire systems because of their complexity, scale and scope. These projects increase the asset's value, take several years to complete, and usually require debt financing.

2. Enhancement Program (FY2016-2025)

In this Plan, the Airport is initiating several important improvement projects which will benefit the traveling public, enhance revenue and continue the long term planning process for world class facilities at the Airport. Below is an overview of the Airport's \$4.4 billion ten-year enhancement program by infrastructure category.

Airfield. Investing \$335.9 million to install runway safety areas (RSAs), overlay, reconstruct, and improve common landing areas, runways, taxiways, ramps, aprons, adjacent infield areas, and related support facilities, including:

- Taxiways – \$101.7 million to reconstruct taxiways, vehicle service roads, upgrade and replace airfield infrastructure, and improve airfield markings;
- Runways – \$75.1 million for overlay and reconstruction of Runway 10L-28R and 1R-19L;
- Airfield Improvements – \$21.8 million to reconstruct various airfield areas, including airfield perimeter security fencing, video surveillance systems, perimeter lighting and other security systems; and
- Apron Reconstruction – \$20.4 million to reconstruct airfield aprons at Boarding Areas A, D, and G.

Airport Support. Investing \$275.4 million to expand and improve areas and facilities which support airline functions (e.g. hangars, aircraft maintenance facilities, etc.) and government installations (e.g. FAA, FBI, Post Office, Airport Commission), including:

- Consolidated Administrative Campus – \$56.8 million to develop a Consolidated Administration Campus for architecture and engineering staff;

- Hangar and Cargo Facility Improvements – \$33.8 million to replace and renovate cargo and hangar facilities at the Airport;
- South Field Redevelopment Program – \$31.6 million to demolish and rebuild Fire House #3, realign Taxiways H and M, demolish the TWA hangar and commissary buildings, and relocate the South Field Check Point;
- Air Traffic Control Tower – \$25.5 million to demolish the old air traffic control tower and refurbish the buildings at the base of the tower in Terminal 2;
- Security Improvements – \$20.6 million to replace the Access Control System, to relocate the Security Access Office, to upgrade rolling gates at the U.S. Coast Guard facility, and to construct an Airfield Operations Facility;



New Air Traffic Control Tower

- Ground Transportation Management System (GTMS) Replacement – \$20.3 million to replace and integrate the various systems used to manage commercial ground transportation functions;
- Airport Support Facility Improvements – \$15.4 million to rebuild and enhance facilities that are scheduled to be renewed, including baggage handling systems and explosive detection systems;
- Technology Systems Improvements – \$12.5 million to upgrade and replace existing technology assets that will become either physically or functionally obsolete and to expand newer technology systems that have become standard for conducting business efficiently;
- Shoreline Protection – \$10 million for initial design and construction of shoreline protection elements, including the existing seawall and levees;
- Energy Efficiency Improvements – \$5.6 million to improve the chilled water distribution system, and convert pumps and controls;
- Capital and Support Equipment – \$5.4 million to replace specialized vehicles for aircraft rescue and firefighting, marine rescue watercraft, shuttle buses and other capital equipment;
- Emergency Response Facilities Improvements – \$4.9 million to renovate the locker and restroom facilities at the Airfield Fire Stations and add a training facility;
- Fire Equipment Replacement Program – \$3.7 million to replace vehicles used by the San Francisco Fire Department on the Airport campus, including a new rescue vehicle, paramedic vehicles, and a hazardous materials emergency response trailer; and
- Airport Employee Facility Improvements – \$1.1 million for improvements to Airport offices in the International Terminal.



San Francisco Airport Central Plant

Groundside. Investing \$449.2 million to rebuild, seismically reinforce, and enhance roadways and parkways, courtyards, fences, bridges, the AirTrain system, the Rental Car Center, public parking lots, and garages, including:

- On-Airport Hotel – \$165.0 million to build a new 403 room hotel on the site of the former Hilton hotel;
- AirTrain Extension and Improvements – \$95.0 million to extend the AirTrain from the rental car facility to the long-term parking garage, and for replacement of the radio

system and automatic train control system;

- Long-Term Parking Garage – \$72.0 million to construct a second long-term parking garage;
- McDonnell Road Realignment – \$32.2 million to realign the roadway around the planned hotel and provide for additional parking spaces for aircraft remaining overnight;
- Roadway Improvements – \$32.2 million to rebuild and expand roadways, including changes to the North Field Access Road, and reroute utilities;
- Plot 700 Redevelopment Program – \$28.5 million to relocate various Airport support facilities away from McDonnell Road;
- Public Parking Lot/Garage Improvements – \$19.4 million to renovate and enhance parking facilities with new technology and automation;
- Viaduct Improvements – \$10.6 million for Phase 2 of the project to reinforce the main roadway connecting the terminals; and
- Variable Message Sign Improvements – \$8.2 million to replace signs at the Airport entrances with more efficient units that offer greater functionality.

Terminals. Investing \$3,186.4 million to rebuild and upgrade areas within the terminal complex, such as the Airport concourses, boarding areas, pedestrian bridges, lobbies, and offices, including:

- Terminal 1 – \$2,240.3 million in planning, programming and construction funding for the Terminal 1 renovation project, including a new Boarding Area B;
- Terminal 3 East & West Side Improvements – \$400.7 million to improve and upgrade the structural, mechanical, telecommunications, electrical, and special systems, address seismic issues, and create a unified Terminal 3 checkpoint;
- Terminal 3 Boarding Area F – \$388.3 million to redesign and rebuild the existing boarding area to accommodate additional gates and planes and expand concession areas;
- Terminal 3 to Terminal 2 Secure Connector – \$2.0 million for initial design of a secure connector between T2 and T3 (similar to the new connector between Terminal 1 and Terminal 2);
- New Air Traffic Control Tower (ATCT) – \$22.1 million for the remaining work to complete the new ATCT currently under construction, including public facilities at the base of the tower to accommodate concession areas, restrooms, terminal secure connector, and an airline club room;
- Miscellaneous Terminal Facility Renovations – \$40.3 million to make terminal safety improvements, replace aged equipment, and enhance and upgrade various terminal building systems and structures;
- Escalator, Moving Walks and Elevator Improvements – \$32.2 million to replace terminal escalators, moving walks and elevators;
- REACH Program – \$22.7 million to extend the principles of the REACH Program to other areas of the Airport with the construction of four mini-parks at the International Terminal;
- Fire & Life Safety Systems – \$15.7 million to replace and upgrade fire alarm and fire protection systems in terminals and support facilities; and



Conceptual Design for Terminal 1

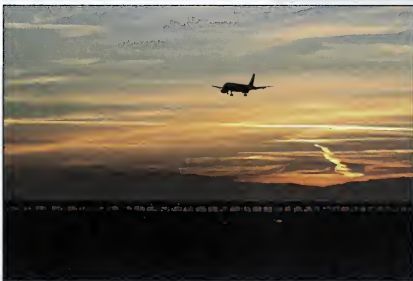
- Terminal Energy Efficiency Projects – \$5.5 million to upgrade mechanical systems throughout the terminal complex to increase efficiency, including pneumatic controls associated with the main Air Handling Units and chilled water distribution.

Utilities. Investing \$170.2 million to rebuild water systems, sewage and industrial waste systems, storm drainage systems, central plant systems, and telecommunications systems, including:

- Power and Lighting System Improvements – \$65.1 million to replace airfield power and lighting systems, and supporting infrastructure;
- Wastewater System Improvements – \$45.2 million to replace drainage and sewage systems, construct a new industrial waste processing facility within the Mel Leong Treatment Plant, and construct a new sewer outfall;
- Central Plant Improvements – \$28.5 million to replace equipment and upgrade control systems for the Airport's Central Plant, which will improve energy efficiency and reduce power and fuel consumption;
- Water Systems Improvements – \$26.8 million to rebuild water system infrastructure, including the phased replacement of water mains; and
- Storm Drain Improvements – \$4.6 million to replace sections of the storm drain network, including pump stations.

3. Emerging Needs

The Airport is continuing to evaluate its facilities in light of expanding demand for air travel and the aging of its existing infrastructure. The Commission is currently preparing a new Airport Development Plan (ADP), which will guide future facility investments, while incorporating T2 design standards and REACH principles into projects. The last SFO Master Plan was developed in 1989, and while it has guided the Airport's investments since then, many of the projects are complete, and that plan's planning horizon has been reached. The new Airport Development Plan, which is anticipated to be completed in summer 2015, will address the Airport's projected demand for the next 10 to 15 years, a period over which the Airport is projected to reach saturation of its current airfield capacity. The passenger forecast corresponding to the ultimate constrained activity level is 61.8 million annual passengers, which is more than 35% over 2014 levels. SFO would not be able to accommodate that number of passengers without an increase in nearly all areas of the terminals and supporting facilities. The timing and magnitude of new facility needs will be more clearly understood when the Airport Development Plan is completed; nevertheless, several of the most likely emerging needs are described below. Future Airport capital plans will incorporate cost estimates and financing plans for these projects if and when they are determined to be needed.



New Rental Car Facility: The Airport is evaluating how to address the limitations of the existing rental car center. The facility, which is operating at capacity, does not provide space for on-site storage of vehicles for lease; as a result, operators must deliver cars from off-site, which delays customer fulfillment, is inefficient, and increases air emissions. The aging facility is not built to industry standards. The Airport is exploring industry standards for a state-of-the-art facility that combines a number of features, including expanded on-

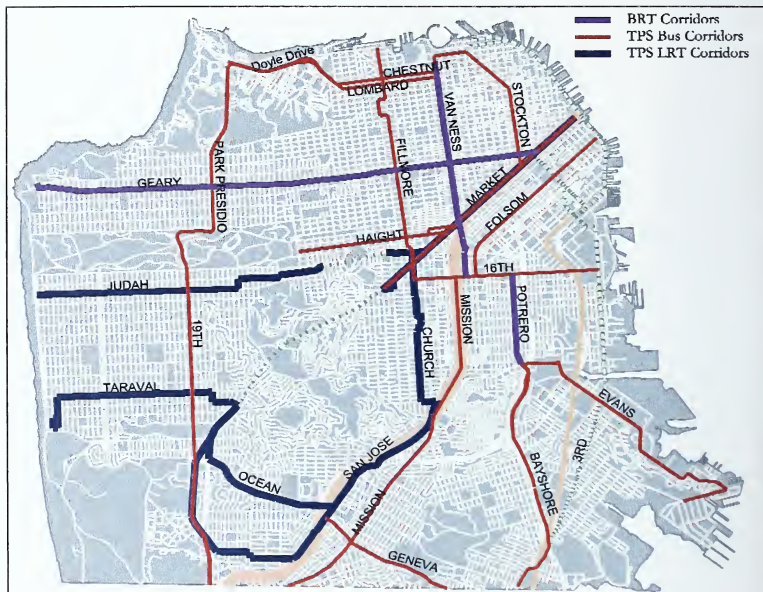
site parking, a quick turnaround facility (to prepare returned cars for immediate release), and improved customer amenities.

Shoreline Protection System: The Airport's entire eastern boundary (approximately 8 miles) is bounded by the San Francisco Bay. In response to concerns on climate change, the City has created a working committee called SF Adapt to understand and set policy regarding sea level rise; the Airport is an active participant in SF Adapt, along with DPW, the PUC, the MTA, the Port, and other city departments. The City, along with the State of California, has adopted the 2012 National Research Council (NRC) report on sea level rise as the best available science for planning purposes.

In response, the Airport is conducting a shoreline protection feasibility study to analyze the Airport's vulnerability to flooding from both a 100-year flood and from likely sea level rise. The study, scheduled to be completed in 2015, is intended to identify actions that can be implemented sequentially in an adaptive manner in response to rising sea levels. For example, near term actions may include filling remaining gaps in the existing seawall, reinforcing embankments and raising low lying areas at the end of runways along the San Francisco Bay shoreline. Longer term actions could include replacement of older seawalls and additional seawall protection outboard of existing seawalls to dampen wave energy, or increasing the strength and height of existing seawalls. The Airport is reaching out to neighboring entities in San Mateo County to coordinate efforts and ensure a cohesive and comprehensive plan for the area. The Airport is also in discussions with the Army Corps of Engineers for possible assistance in protecting the Airport against flooding and sea level rise.

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Interagency Initiatives



Meeting San Francisco's future transportation needs and transit goals requires the City to coordinate with a number of state and regional transportation agencies including the San Francisco County Transportation Authority (SFCTA), the Peninsula Corridor Joint Powers Board (Caltrain), and the Transbay Joint Powers Authority (TJPA). Major interagency capital projects include implementation of Bus Rapid Transit along Geary Boulevard and Van Ness Avenue, maintenance, electrification, and improvement of Caltrain, and construction of a new Transbay Transit Center, which will be the northern terminus for the Caltrain Downtown Extension and High-Speed Rail. In 2014, the SFCTA initiated an update of the San Francisco Transportation Plan, the long-range countywide transportation plan, which will evaluate existing needs and growth trends in an effort to develop updated transportation sector policies, strategies and investment priorities for sustainable growth.

San Francisco County Transportation Authority (SFCTA)

The SFCTA is the sub-regional transportation planning and programming agency for the City and is responsible for development of the City's long-range transportation planning. In this capacity it analyzes, designs and funds improvements for San Francisco's roadway and public transportation networks. The SFCTA also administers and oversees the delivery of the voter-approved Prop K half-cent local transportation sales tax program and the Prop AA vehicle registration fee. Additionally, it serves as the designated Congestion Management Agency (CMA) for San Francisco under state law and acts as the San Francisco Program Manager for grants from the Transportation Fund for Clean Air (TFCA). As of 2014, the Transportation Authority Board serves as the governing body for the newly established Treasure Island Mobility Management Agency (TIMMA)(see below).

As the Congestion Management Agency for the City, the SFCTA prepares the long-range countywide transportation plan. The San Francisco County Transportation Plan (SFTP) is a multi-agency, multi-operator, multi-network effort that identifies long-range transportation system needs for San Francisco, prioritizes future transportation improvements within expected revenues, and recommends policy and institutional changes to support investments in the system. The 2004 Countywide Transportation Plan provided the policy context for the Proposition K Sales Tax Expenditure Plan, and advanced several initiatives including Bus Rapid Transit (BRT) treatments on the city's network of Transit Preferential Streets; demand management through pricing strategy; and a new approach to multimodal neighborhood transportation planning.

In December 2013, the SFCTA adopted the 2013 SFTP update, which was prepared in parallel with the Bay Area's first Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS) plan known as Plan Bay Area. Highlights of the SFTP policy and investment package include recommendations for a performance-based, multi-modal management strategy for U.S. 101 and I-280; core capacity improvements focused on serving the South of Market area; comprehensive transportation demand management (including pricing); establishment of a Neighborhood Transportation Improvement Program (planning and capital grants) to address equity issues and build community understanding and capacity to participate in transportation planning; and project delivery recommendations. The SFTP provided the needs assessment and policy context for the T2030 Task Force recommendations.

The SFCTA has just initiated a focused update of the SFTP timed to coincide the 2017 Plan Bay Area update. The SFTP update will build on the 2013 SFTP framework and focus on refining project placeholders related to many of the aforementioned SFTP recommendations – all of which are now moving forward (such as SFMTA Rail Capacity Study, BART Vision, and SFCTA Freeway Corridor Management Study) and develop a policy framework for a few emerging areas (e.g. shared mobility). The SFTP will include a preferred financially constrained investment scenario and one or more vision scenarios, as well as strategic policy initiatives. The SFTP development process is informed by an interagency Executive Steering Committee and Technical Advisory Committee (TAC), and informed by a robust community engagement process.

The SFCTA administers the Proposition K half-cent local transportation sales tax program, passed by 75% of San Francisco voters in November 2003.



*Computer Rendering of Proposed Van
Ness Avenue Bus Rapid Transit*



Conceptual rendering of a Caltrain rapid electric rail locomotive

Since the last Citywide Capital Plan update, the SFCTA capital project accomplishments include:

- Presidio Parkway - Phase 1 (traditional design/bid/build) opened to public in April 2012; Phase 2 (first Public Private Partnership under Senate Bill X2 4) anticipated substantial completion in 2015.
- Van Ness BRT – Environmental Impact Report/Environmental Impact Station (EIR/EIS) certified December 2013; Transitioned to SFMTA for design, construction and operations (revenue service anticipated fall 2018)
- Geary BRT – Administrative Draft EIR/EIS transmitted jointly by TA/SFMTA in December 2014; transition to SFMTA for design, construction, and operations. Anticipated construction start for near-term improvements in late 2015, and full BRT in 2017.
- YBI Ramps – EIR/EIS certified 2011, construction started January 2014.
- YBI Bridge Structures – Environmental clearance 2012, final design anticipated to start early 2015.
- Folsom Ramps – Construction started September 2014, anticipated completion by April 2015.

Transbay Joint Powers Authority (TJPA)

The TJPA oversees the Transbay Transit Center/Caltrain Downtown Extension Project. It is responsible for designing, constructing and operating the new Transbay Transit Center and associated facilities in downtown San Francisco, including the extension of the Caltrain commuter rail into the new Transit Center and accommodations for future California High Speed Rail.

Peninsula Corridor Joint Powers Board (JPB)

San Francisco, along with San Mateo and Santa Clara counties, is a representative member of the Peninsula Corridor Joint Powers Board (JPB) which operates and maintains Caltrain – one of the oldest commuter rail services in Northern California. Caltrain provides peak and off-peak connections along the Peninsula rail corridor between San Francisco and Gilroy. Per the 1996 Joint Powers Agreement, funding for system-wide capital improvements are shared equally among the three members, while local improvements are, in general, borne by the County partner in which the improvements are located.

The total estimated cost for the ten-year JPB Capital Improvement Program (CIP) is \$3.3 billion, as projected in its most recent Short Range Transit Plan (SRTP), covering FY 2015 through FY 2024. This includes basic maintenance and renewal costs as well as major enhancements such as the conversion to an electrified system and installation of a federally mandated Positive Train Control (PTC) system.

1. Renewals

JPB Caltrain Renewal Program

Pursuant to the Joint Powers Agreement between the three JPB member entities, each member has been contributing a one-third share towards Caltrain's local match for its capital projects that are designed to replace, enhance or expand Caltrain assets. Per Caltrain's most recent SRTP covering FY 2015 through FY 2024, the City's share for matching and/or funding system-wide improvements through available Proposition K funds, excluding electrification, is anticipated to be about \$38 million.

2. Enhancement Program (FY2016 - FY2025)

Bus Rapid Transit (BRT)

The City's 2013 San Francisco Transportation Plan helps implement San Francisco's Transit First Policy by funding cost-effective Bus Rapid Transit (BRT) treatments on the city's network of Transit Preferential Streets (TPS).

BRT is a new mode of transit for San Francisco, developed to deliver many of the benefits of light rail at a lower cost. It is a high-quality transit service that reduces travel time, increases reliability, and improves passenger comfort by giving the bus an exclusive lane to operate faster and more reliably. Key components of a BRT system include: dedicated lanes or exclusive guideways; modern, low-floor, high-capacity buses; high quality bus stops; streetscape improvements and pedestrian amenities; proof of payment and all door boarding; and advanced transit and traffic management systems such as signal priority and real-time information systems.

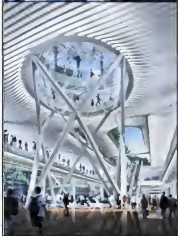
The SFCTA, in partnership with SFMTA, is currently finalizing environmental studies for BRT on Geary Boulevard and undertaking a feasibility study for BRT in the Geneva-Harney corridor. These projects follow on the heels of Van Ness BRT, for which the SFMTA is now leading design (See XX section). Geary corridor is the most heavily used transit route in northern San Francisco with approximately 55,000 daily boardings. Although the Geary lines operate at high frequencies, they are plagued by a variety of traffic and transit conditions that degrade both the travel time and reliability of service. The Geneva-Harney BRT project would provide a much needed rapid transit connection in the southeastern part of the city, connecting existing and planned jobs and housing with transit hubs throughout the corridor, including the Balboa Park BART/Muni Station, the T-Third, Bayshore Caltrain Station, and the future Hunters Point Transit Center.

The Geary BRT project is addressing both transit and other corridor needs. The project includes bus lanes and station and stop bus-operation improvements and amenities, while avoiding heavy investment in changes to existing structures such as the Masonic and Fillmore underpasses. The project includes a comprehensive set of scope items, including a BRT facility as well as overall street enhancements that address the needs of other infrastructure systems along the Geary corridor. Such items to accommodate or accompany BRT street design changes include street re-surfacing, underground sewer and water line utility work to accommodate provision of the bus lane and station improvements, street lights, landscaping, traffic signal equipment and communications upgrades, and pedestrian bulb-outs and curb ramps.

The SFMTA and SFCTA are proposing phased implementation of the Geary BRT project in order to expedite the delivery of transit improvements to the Geary corridor. The near-term proposals' capital investments include bus zone changes, right turn pockets, transit-only lane installation, bus bulbs, pedestrian bulbs, and signal upgrades. These Initial Construction Phase improvements respond to Board and public input asking for travel and other community benefits to be delivered to the corridor quickly and on a rolling basis, so that the community does not need to wait until the full BRT project, anticipated to be completed in Fiscal Year 2019/20, to begin enjoying improvements. The Initial Construction Phase is targeted for implementation in 2016.

Improvements on Van Ness and Geary have been prioritized for funding through the 2014 Prop K Strategic Plan and 5-Year Prioritization Program updates. Certification of the Environment Impact Report for the Geary BRT project is expected in fall 2015.

While the Geneva-Harney corridor sees substantial transit use today, planned developments at Candlestick and Hunters Point Shipyard will significantly increase overall trip-making in the future. In partnership with SFMTA and Daly City, the SFCTA is leading the Geneva-Harney BRT Feasibility Study to identify and analyze right-of-way constraints for BRT operation in the corridor, develop cost estimates, and prepare an alternative concept or concepts for further refinement. Additionally, the study includes a light rail feasibility analysis, assessing a potential future light rail alignment extending from the T-Third Sunnydale Station across



Conceptual renderings of Transbay Transit Center

Geneva Avenue to Balboa Park. Phased buildout of the Geneva-Harney BRT will coincide with the construction timetables of the Candlestick and Hunters Point projects. In the early years, existing transit routes will increase in frequency and use a near-term alignment. At full buildout, the Geneva-Harney BRT is expected to operate on a new extension of Geneva Avenue, connecting to Harney Way.

Presidio Parkway Project

The Presidio Parkway, also known as Doyle Drive or Route 101, is currently being reconstructed to address a myriad of problems associated with the aging structure. Doyle Drive was originally constructed in 1936 through what was then an active Army installation known as the Presidio of San Francisco. The road was elevated to meet Army security requirements. In 1994, the military base was converted to a national park. As part of this conversion the Doyle Drive has been re-envisioned as the Presidio Parkway - a roadway tucked into the natural contours of the Presidio of San Francisco and the Golden Gate National Recreation Area.

The project addresses the structure's end-of-useful-life issues including: seismic vulnerability, lanes that are too narrow; no barrier separating opposing traffic flows; and no shoulders for disabled vehicles, maintenance crews, and emergency vehicles.

The project is fully funded and is being delivered in two phases. Construction for Phase I began in late 2009. In mid-2012 a portion of the new permanent parkway as well as a temporary bypass were opened. With the completion of the Phase I construction elements, the traffic was diverted on to a seismically safe roadway, to allow for the Phase II construction to begin in summer of 2012. During Phase II, all remaining project elements will be completed, transforming the regional gateway linking the Golden Gate Bridge and City.

The Phase II includes the northbound High Viaduct and Battery Tunnel, the Main Post Tunnels, the realignment of Highway 1/101 Interchange, and the new Girard Road Interchange. The Phase II of the Presidio Parkway project is being delivered through the State's first public-private-partnership (P3). The developer, Golden Link Concessionaire, was selected to design, build, finance, operate and maintain the project for 30 years while SFCTA and Caltrans maintain an oversight role. The construction of the remaining project elements have been ramping up steadily during the past year and the project will reach substantial completion by Mid-2015.

The new design will open up views of the San Francisco Bay, create new direct access to the Presidio from Doyle Drive, and enhance pedestrian and cyclist connections within the Presidio. An extensive landscaping effort will follow completion of major elements in coordination with the Presidio Trust during 2015 and 2016.

Treasure Island and I-80/Yerba Buena Island Interchange and Mobility Projects

I-80/Yerba Buena Island Interchange Project. Yerba Buena Island (YBI) and Treasure Island (TI) are located in the San Francisco Bay, approximately halfway between Oakland and San Francisco, and are accessible by vehicles only via the San Francisco-Oakland Bay Bridge. YBI and TI are accessed by on-and off-ramps located on the upper and lower decks of the Bay Bridge. The San Francisco County Transportation Authority is working with the Treasure Island Development Authority (TIDA) on the development of the I-80/Yerba Buena Island (YBI) Interchange Improvement Project. This project is independent of but closely coordinated with the new eastern span of the Caltrans Bay Bridge projects and the TIDA Treasure Island Redevelopment project. The project is funded with Federal Highway Bridge Program, Proposition 1B Local Bridge Seismic Retrofit Account and TIDA local match funds.

The scope of the I-80/YBI Interchange Improvement Project includes two major components. On the east side of the island, the I-80/YBI Ramps project will construct new westbound on and off ramps to the new eastern span of the Bay Bridge. Total estimated project cost is currently \$92.7 million. The project started construction in January 2014 and is scheduled for completion in August 2016. On the west side of the island, the YBI West-Side Bridges project will seismically retrofit the existing bridge structures—critical components of island traffic circulation between the island and the Bay Bridge. Total estimated project cost is currently

\$66.3 million. The project is currently scheduled to start construction in the spring of 2017 with completion targeted by the summer of 2019.

Treasure Island Mobility Management Program The Treasure Island Transportation Management Act of 2008 (California State Assembly Bill No. 981) directs the Treasure Island Development Authority (TIDA) Board of Directors and the Board of Supervisors (BOS) to designate a board or agency to serve as the Treasure Island Mobility Management Agency (TIMMA). The purpose of the TIMMA is to implement a comprehensive and integrated Transportation Program to manage travel demand on Treasure Island as the TI/YBI Redevelopment Project develops. The centerpiece of this innovative approach to mobility is an integrated and multimodal congestion pricing demonstration program that applies motorist user fees to support enhanced bus, ferry, and shuttle transit, as well as bicycling options, to reduce the traffic impacts of the project.

Since Fiscal Year (FY) 2011/12, the Transportation Authority has conducted pre-implementation planning on behalf of TIDA and TIMMA. On April 1, 2014, the San Francisco Board of Supervisors approved Resolution 140224 designating the Transportation Authority as the TIMMA to implement the Transportation Program. The Transportation Authority and TIDA Boards execute annual operating MOAs, which outline an annual operating budget and work plan to conduct pre-implementation planning for the Mobility Management Program. Beginning in FY 2011/12 through the current period, the Transportation Authority has advanced the scope of work encompassed by these MOAs, including: successful grant applications to the Federal Highway Administration (FHWA) and Metropolitan Transportation Commission (MTC) for planning and design funds; development of TIMMA agency formation plans; policy and financial analysis (estimated completion in June 2015); collaboration with partner agencies on operating agreements; and initiation of systems engineering activities (the Concept of Operations and draft Systems Engineering Management Plan). Policy decisions on pricing/tolling are anticipated in early 2015.

The annual work programs through FY 2014/15 have been funded by the FHWA and MTC planning and design grants, with local match from TIDA and the local Prop K transportation sales tax. TIDA will continue will continue to support the annual TIMMA work program over the next few years by providing matching funds to anticipated future grants. The capital elements that will be funded by TIMMA include upfront capital cost of tolling infrastructure and ferry vessel purchase. Installation and testing of the tolling system is expected to start at the end of FY 2016/17. All work is timed to support new development on island, with sales of the first 1000 units expected in FY 2017/18.

After opening for operation in FY 2017/18, the ongoing operations for enhanced transit service and maintaining a modest capital program (e.g. the tolling infrastructure mentioned above) will be funded by pricing and toll revenues generated on the island as well as any additional resources that the TIMMA and its partners can develop, including grants.

Folsom Street Off-Ramp Realignment Project

The Folsom leg of the Fremont/Folsom Off-Ramp from westbound I-80 is being realigned to facilitate better pedestrian movement and improve the pedestrian environment in the area. This project is a major component of the Streetscape and Open Space Plan for the Transbay Redevelopment Project. The estimated total project cost is \$3.5 million. Funding for the project is provided entirely by the Office of Community Investment and Infrastructure, Successor Agency to the Redevelopment Agency (OCII). The SFCTA is implementing the project on behalf of the OCII. Construction began in September 2014 and is expected to be completed in April 2015.

Caltrain Oakdale Avenue Station

The SFCTA, in partnership with the SFMTA, is coordinating with Caltrain/JPB staff to evaluate construction of an infill station at Oakdale Avenue. This station would serve as a regional transit connection for the Bayview, Hunters Point, and surrounding neighborhoods. In March 2013, SFCTA completed a Ridership Study, finding strong demand for a new station. Local Prop K funds will provide for additional project development and environmental study. The collaboration between the three partner agencies, JPB, SFCTA, and SFMTA, is currently working to ensure that plans for Caltrain electrification and bridge replacement do not preclude the potential construction of a new station at this location.

Quint Street Bridge Replacement and Quint-Jerrold Connector Road

The existing Caltrain rail bridge over Quint Street is over 100 years old and in need of replacement. The Quint Street Bridge Replacement project will replace the rail bridge with a berm that will facilitate construction of a potential future Caltrain station at Oakdale Avenue. Caltrain obtained funding for the \$20 million project through a combination of federal funds from the FTA, state funds (Prop 1B), and JPB member contributions (Prop K from San Francisco). Construction is expected to run from October 2015 through March 2016. Project costs for the bridge replacement are included in the Caltrain Financial tables.

The SFCTA and SF Public Works are working collaboratively on the Quint-Jerrold Connector Road Project, which will link Quint Street just north of Oakdale Avenue to Jerrold Avenue via a new road along the west side of the Caltrain tracks. The road is also intended to support a potential new Caltrain Station at Oakdale Avenue and provide access to other nearby land uses. The current cost estimate for the project is \$7.4 million based on planning level designs. Planned funding for the project includes Caltrain funds obtained by swapping FTA funds with local funds since FTA funds cannot be used on the Connector Road. SFMTA has agreed to work with the SFCTA and Caltrain on this fund swap. Local Prop K funds will comprise the majority of the additional funding, but the SFCTA has also been in discussion with the SFPUC to see if it can partner on the funding for the Connector Road. Construction of the Connector Road will follow the bridge replacement; it is anticipated to start in October 2016 and be completed by June 2017.

Better Market Street

The Better Market Street project is supported by five city agencies including San Francisco Planning Department, DPW, San Francisco Office of Economic and Workforce Development, SFCTA, and SFMTA. To learn more about the project please refer to the Streets and Rights-of-Way section of the Capital Plan.

TJPA Enhancement Program (FY2016-2025)

Transbay Transit Center

The Transbay Transit Center Project will help centralize a fractured regional transportation network by building an intermodal hub connecting eight Bay Area counties and the State of California through 11 transit systems: AC Transit, BART, Caltrain, Golden Gate Transit, Greyhound, Muni, SamTrans, WestCAT Lynx, Amtrak, Paratransit and the future High Speed Rail. The project consists of three interconnected elements including: (1) Replacing the outmoded Transbay Terminal at First and Mission Streets with the modern Transbay Transit Center; (2) Extending Caltrain and California High Speed Rail underground from Caltrain's current terminus at 4th and King streets into the new downtown Transit Center; and (3) Creating a new mixed-use neighborhood surrounding the new Transit Center, including transit-oriented development on publicly owned land in the vicinity of the new Transit Center. To learn more about Caltrain's electrification project please refer to the Caltrain Enhancement Program (above) within this chapter. For more information on the neighborhood development efforts, refer to the Office of Community Infrastructure and Investment Section within the Economic & Neighborhood Development Chapter of this Plan

The first phase of the project entails the construction of a new five-story Transit Center serving Caltrain and future California High Speed Rail. Phase I will also create new bus ramps that will connect the Transit Center to a new off-site bus storage facility and the San Francisco-Oakland Bay Bridge. The new Transit Center will feature a 5.4 acre park on the roof. Additionally, land sales revenues from parcels donated to the project by the State of California are providing financing for the project, including from the adjacent parcel where Hines and Boston Properties are developing the new Salesforce Tower Phase I began in 2008 with the building of a temporary terminal designed to serve passengers while the new Transit Center is under construction. In 2010, operations at the temporary terminal commenced and construction of the new Transit Center began. The Temporary Transbay Terminal is currently serving nearly 20,000 bus passengers every weekday. The Transit Center is scheduled to be completed in 2017.

The second phase of the project includes the completion of the 1.3-mile extension of the Caltrain rail line from Fourth and King streets to the new Transit Center. The timing of Phase II construction will be based on available revenues.

The project is designed to provide a variety of public benefits including: accommodation of projected growth in travel; improved access to rail and bus services; improved Caltrain service by providing direct access to downtown San Francisco; enhanced connectivity between Caltrain and other major transit providers; modernization of the Transbay Transit Center that meets future transit needs including high-speed rail; reduced non-transit vehicle use; reduced traffic congestion and vehicle hours of delay on major freeways; and the alleviation of blight and revitalization of the Transbay Terminal Area. The TJPA also projects improved regional air quality by reduced auto emissions. Additionally the project calls for construction of 2,600 new housing units, thirty-five percent of which would be affordable. Developing housing next to a major transit hub will further facilitate the use of transit and enhance access to employment, retail, and entertainment opportunities; and support of local economic development goals.

The project's total capital cost is estimated at \$4.5 billion, escalated to the year of expenditure (VOE). It is funded through a mix of local, regional, state and federal funds.

Recent accomplishments include:

- The beginning of structural steel assembly on site.
- Completion of the Transit Center's mat slab foundation.
- The drilling of foundation piles for the Transit Center's new bus ramp.
- Sale of Transbay Block 6 for over \$30 million.
- Completion of utility relocation work.
- Fourth full year of successful operation of the Temporary Terminal.
- Designation as regional priority for federal New Starts program to provide significant construction funds for Phase II.

JPBA Enhancement Program (FY2016-2025)

Caltrain Electrification

In March 2012 the JPB entered into an MOU with the California High Speed Rail Authority (CHSRA) to make strategic, early investments in the Peninsula Corridor that would allow Caltrain's existing system to support high-speed rail services while enhancing Caltrain service. These improvements include corridor electrification and an advanced signal system which are estimated to cost approximately \$1.7 billion. The electrification program is the centerpiece in Caltrain's proposed Capital Improvement Program (CIP) to transform the system into a world class commuter rail system connecting San Francisco and San Jose.

This work will occur over the next ten years and will dovetail with the scheduled replacement of the majority of the Caltrain fleet with modern, quieter and cleaner passenger trains. The total project cost for the Electrification Infrastructure program is \$958 million, while the replacement of train-sets is estimated to cost \$572 million.

The MOU identifies a mix of local, regional, state and federal funding sources to cover the improvement costs. At the local level, the JPB has agreed to contribute \$180 million, to be split equally between the three JPB member entities. The JPB CIP includes \$60 million in San Francisco funding sources, with roughly \$24 million from the Proposition K sales tax funds and an estimated \$40 million from General Obligation Bonds.

3. Emerging Needs

I-280 Interchange Improvements at Balboa Park

The I-280 Interchange Improvements at Balboa Park consist of several project elements recommended in the Balboa Park Station Area Circulation Study, adopted by the Transportation Authority Board in June 2014. These include the realignment of the southbound off-ramp from I-280 to Ocean Avenue and the closure of the northbound on-ramp from Geneva Avenue. Both provide extensive pedestrian and safety benefits while minimizing traffic impacts to I-280 and the surrounding areas. The rough order of magnitude estimate for planning, design, and implementation of these elements is \$11 million. An initial scoping phase, with a budget of

\$39,000, is funded by Prop K. The scoping phase will determine the next steps and procurement of consultant support for each of the project elements. It is expected that the southbound off-ramp realignment will next enter the Caltrans Project Initiation Document (PID) phase; the northbound on-ramp closure will first require a Ramp Closure Analysis for FHWA approval.

The 2014 Prop K Strategic Plan includes \$750,000 for early planning work for both of elements. The Ramp Closure Analysis will be completed first and, unless the proposal is rejected by FHWA, may subsequently result in a recommendation of a pilot closure prior to full implementation. The timing such a closure would need to be carefully evaluated based on other transportation projects in the area. The PID phase for the southbound off-ramp is expected to take approximately 18 months to complete and could result in construction in 3 to 5 years. Funding for design and implementation has not been secured.

Transportation

Program / Project	Prior Years	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN									
Municipal Transportation Agency (SFMTA)	-	875,341	854,867	479,918	439,573	234,367	1,443,760	4,153,016	5,342,780
International Airport (SFO)	-	595,620	687,722	590,550	523,700	511,865	1,763,313	4,672,770	-
Interagency Initiatives	2,547,836	767,853	776,091	693,481	482,856	291,137	3,551,760	8,593,145	-
TOTAL	2,547,836	2,223,814	2,148,480	1,763,928	1,448,531	1,037,369	6,798,813	16,418,935	5,342,780
REVENUES									
Transportation Bond	-	102,935	103,716	45,486	91,216	-	371,918	715,276	-
Local	651,542	636,450	367,409	408,029	379,051	268,353	713,558	2,772,850	-
Regional	535,582	53,643	233,091	73,973	11,640	33,689	1,650,983	2,007,004	-
Federal	895,355	617,452	402,007	367,338	302,939	154,040	1,196,676	3,060,451	-
State	335,275	144,445	161,462	237,749	230,862	8,566	29,583	830,176	-
Other	-	578,924	670,419	572,638	505,178	492,686	1,656,679	4,476,524	-
TOTAL	2,430,354	2,132,850	1,955,105	1,735,212	1,521,008	955,232	5,559,782	13,852,280	-
Total San Francisco Jobs/Year		17,631	16,370	14,506	12,716	7,986	46,400	115,689	-
Annual Surplus (Deficit)									
	(117,282)	(80,964)	(190,375)	(28,716)	74,477	(82,046)	(1,239,031)	(1,673,536)	-
Cumulative Surplus (Deficit)									
	(117,282)	(208,246)	(398,620)	(427,336)	(352,859)	(434,905)	(1,239,031)	-	-

Departmental Breakdown **Municipal Transportation Agency (S/MTA)**

Program / Project	Prior Years				FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN												DEFERRED
Accessibility		1,167	4,200	3,700	5,500	3,013	15,067	32,447	8,133			
Bicycle		35,453	23,535	12,569	14,171	10,061	146,993	185,020				
Central Subway		190,940	150,000	150,000	98,521							
Communications/IT Infrastructure		4,020	1,611	900	900	900	4,500	12,532	36,249			
Facility		45,800	34,950	1,000	1,000	11,951	59,753	154,454	827,965			
Fleet		321,048	199,747	205,003	124,482	74,807	373,037	1,297,924	710,924			
Parking		9,367										
Pedestrian		18,263	13,357	10,415	13,287	7,305	36,524	99,151	107,987			
School		4,476	2,700	22	22	2,180	10,901	20,301	63,264			
Security		10,071	10,071	3,000	3,000	6,533	32,663	65,356				
Taxi		750	750	750	750	782	3,910	7,691				
Traffic & Signals		24,865	17,252	9,636	4,531	7,083	35,417	98,784	163,571			
Traffic Calming		9,137	2,829	2,240	1,450	2,173	10,866	28,695	79,550			
Transit Fixed Guideway		33,603	30,332	27,056	54,710	31,352	186,759	333,812	760,974			
Transit Optimization & Expansion		162,382	193,333	53,627	117,650	76,426	282,132	885,550	2,116,843			
Transportation Bond Improvements (2024)												
TOTAL		870,341	684,667	479,918	439,973	234,367	1,443,750	4,153,015	5,342,760			
REVENUES												
Transportation Bond		102,936	103,718	45,466	91,218							
Local - Revenue Bond		21,624	106,053									
Other Local		253,415	188,225	133,273	145,964	110,571	505,674	1,337,122				
Federal		426,517	267,505	299,378	127,089	117,240	536,176	1,773,904				
State		65,849	19,166	1,781	75,702	6,556	29,983	199,036				
TOTAL		870,341	684,667	479,918	439,973	234,367	1,443,750	4,153,015				
Total San Francisco Jobs/Year		7,276	5,724	4,012	3,678	1,959	12,070	34,719				

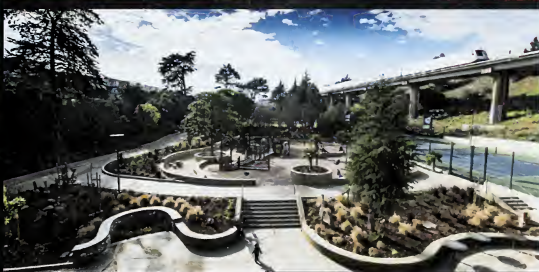
San Francisco International Airport (SFO)

Program / Project	Prior Years	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need		12,084	12,585	13,085	13,584	14,127	79,579	145,044	
SPENDING PLAN									
Operating									
Renewal		12,084	12,585	13,085	13,584	14,127	79,579	145,044	
Capital (by Airport Cost Center)									
Airfield		36,704	48,964	33,570	31,915	33,812	100,223	285,188	
Airport Support		124,315	151,303	53,430	36,260	23,705	40,800	429,813	
Groundside		103,741	172,937	150,714	65,896	10,810	15,675	519,773	
Terminals		277,068	267,897	282,201	352,301	422,355	1,455,601	3,037,424	
Utilities		41,708	34,036	57,550	23,744	7,055	71,435	235,528	
TOTAL		595,620	687,722	590,550	523,700	511,865	1,763,313	4,672,770	
REVENUES									
Operating									
Operating Budget (Renewal / Maintenance)		16,696	17,303	17,912	18,522	19,179	106,634	196,246	
Capital Sources									
Revenue Bonds / Capital Borrowings		530,547	650,831	548,437	485,884	472,338	1,608,945	4,296,982	
Grants		1,377	19,588	24,201	19,295	20,348	47,734	132,542	
PFC funds		47,000	-	-	-	-	-	47,000	
TOTAL		595,620	687,722	590,550	523,700	511,865	1,763,313	4,672,770	
Total San Francisco Jobs/Year		4,979	5,749	4,937	4,378	4,279		39,064	

DEFERRED

Interagency Initiatives

Program / Project	Prior Years	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN									DEFERRED
San Francisco Transportation Authority									
Geary BRT	15,996	13,435	9,715	70,213	-	-	-	219,845	312,208
Piedra Parkway	822,761	34,000	-	-	-	-	-	-	34,000
I-80/Yerba Buena Island Interchange	105,743	-	53,340	-	-	-	-	-	53,340
Quint-Jerrol Connector Road	3,305	4,118	-	-	-	-	-	-	4,118
Treasure Island Mobility Management Program	1,580	1,063	1,850	4,335	-	-	-	-	7,246
Folsom Street Off-Ramp Realignment Project	3,500	-	-	-	-	-	-	-	-
SFTA Subtotal	962,885	62,616	64,905	74,548	-	-	-	-	192,069
Caltrain									
Rolling Stock Replacement	7,800	115,000	111,910	43,150	121,073	84,128	89,459	564,720	
Electrification - Communications-Based Overlay Signal System	206,450	15,972	8,578	-	-	-	-	24,550	
Electrification - Electrification System	43,078	128,129	218,061	325,578	179,095	51,619	12,000	914,482	
Caltrain State-of-Good Repair & Other Enhancements	71,123	109,145	91,258	154,936	159,490	119,990	1,034,410	1,668,228	
Caltrain Subtotal	328,451	368,246	429,807	623,664	465,658	255,737	1,135,869	3,171,980	
Transbay Terminal									
Phase I	1,210,081	335,591	278,779	73,949	-	-	-	689,319	
Phase II	56,219	1,400	1,600	21,300	24,200	35,400	2,455,881	2,539,781	
Transbay Subtotal	1,266,300	336,991	281,379	95,249	24,200	35,400	2,455,881	3,229,100	
TOTAL	2,547,636	767,853	776,091	693,461	482,858	291,137	3,591,750	6,593,149	
REVENUES									
Local - SF Prop K	274,804	13,658	9,820	1,321	2,642	1,321	-	28,782	
Local - CCSF Expected Contribution to Caltrain	-	-	25,981	10,504	9,432	9,894	12,363	18,500	86,675
Local - OCII (Successor Agency)	3,500	-	-	-	-	-	-	-	-
Local - Transbay TDRs & Land Sales	262,732	244,500	-	120,000	-	-	-	364,500	
Local - Treasure Island Development Agency	11,906	425	740	1,734	-	-	-	2,899	
Other Local	108,500	59,513	33,758	71,614	93,539	74,777	82,750	415,950	
Other Local - TBD	-	638	1,005	52,743	108,490	50,142	-	213,018	
Regional	536,582	53,643	233,091	73,973	11,540	33,688	1,600,969	2,007,004	
State	335,875	177,596	162,296	235,968	155,280	-	-	631,140	
Federal	896,355	190,935	134,502	97,960	175,850	36,800	650,500	1,286,547	
TOTAL	2,430,354	666,889	585,716	664,745	557,335	209,091	2,352,719	5,036,495	
Total San Francisco Jobs/Year		5,575	4,897	5,557	4,659	1,748	19,669	42,105	
Annual Surplus (Deficit)	(117,282)	(90,964)	(190,375)	(28,716)	74,477	(82,046)	(1,235,031)	(1,673,936)	
Cumulative Surplus (Deficit)	(117,282)	(208,246)	(398,620)	(427,336)	(352,859)	(434,905)	(1,673,936)		



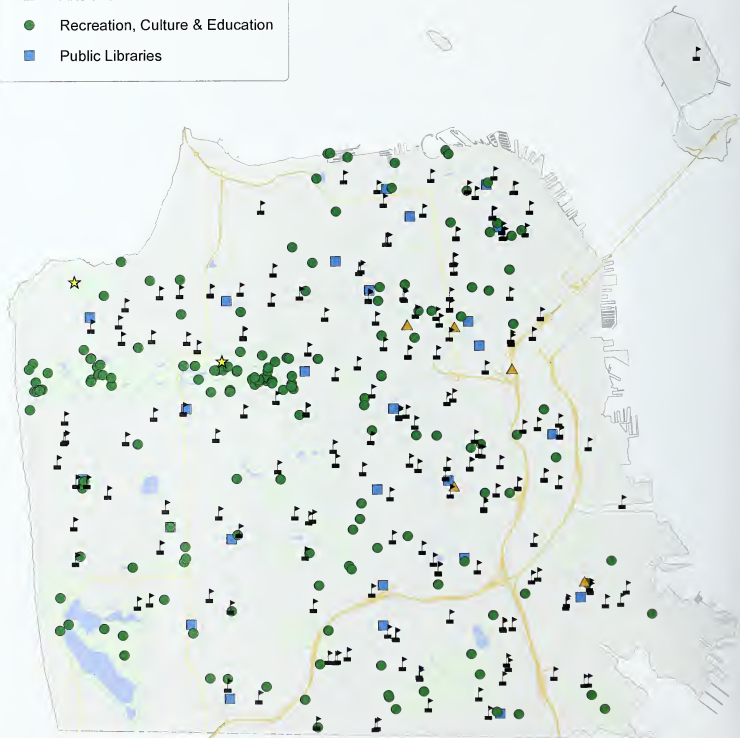
VII | Recreation, Culture & Education

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Recreation, Culture & Education

Legend

-  SF Unified School District
-  Fine Arts Museums
-  Arts and Cultural Centers
-  Recreation, Culture & Education
-  Public Libraries



The Recreation and Parks Department (RPD), art and cultural agencies, public libraries, and two school districts operate nearly 500 facilities and properties that provide recreational, cultural, and educational services.

With over 4,000 acres and 224 properties, RPD manages a large and diverse park system that provides recreation facilities and programs for all ages and interests of San Franciscans. Within San Francisco, its 3,400 acres make it one of the larger land managers within the City, providing outside access through its mini-parks, such as Hyde-Turk, parks such as Palega Park, with amenities of playgrounds and recreation facilities, to its city wide parks, Golden Gate Park and McLaren Park which provide outdoor opportunities to all San Franciscans. Beyond San Francisco County, the RPD owns and maintains the Sharp Park Golf Course in Pacifica and Camp Mather in Toulomne County. In terms of cultural and educational facilities, the City owns 27 branch libraries, four major civic center arts facilities and auditoriums, four neighborhood arts cultural facilities, and over 3,000 public art objects and monuments. The San Francisco Unified School District operates 183 facilities that serve 56,236 students, and the San Francisco Community College District manages twelve campuses for 35,000 full-time equivalent students.

Highlights and Accomplishments

Since 2000, San Francisco voters have approved multiple bond measures to fund libraries, parks, and schools, revealing the City's commitment to culture, recreation, and education facilities. With the monies dedicated by these Bond measures the City has delivered projects that impact the public's safety and well-being, by addressing seismic safety, ADA access as well as providing enhanced leisure opportunities.

Each of these improvement areas are discussed below with the external education agencies included at the end of the chapter.

Recreation and Parks System

Starting with the funds of \$110 million 2000 Neighborhood Parks Bond, RPD has pursued major renovation and modernization of the aging park system. Subsequent bond measures were approved in 2008 and 2012, and these funds have been used to leverage grants, gifts, and other local investments. The 2000 program is nearly complete, funding 84 projects with the \$119 million of bond and interest monies generated. The \$185 million 2008 Clean and Safe Neighborhood Parks Bond created funding for five Citywide Programs for restrooms, playfields, trails and forests throughout the City, a Community Opportunity Fund to leverage small projects, and monies for another 12 parks and recreation centers, focusing on seismic hazards, improving conditions of park structures, and addressing other basic parks and recreation infrastructure needs. Ten of the 2008 Bond park projects have been reopened to the public with Mission Dolores and Kimbell Playground currently in construction and scheduled to open in 2015.

Additional accomplishments throughout the city include:

- Acquisitions of three new parcels, to be developed for the benefit of San Franciscans: Francisco Reservoir, 900 Innes and Schlage Lock, which consists of two sites.
- Cayuga Playground – completed and open to public
- Coit Tower – historic preservation of murals and renovation of building exterior to enhance structural integrity and enhanced access
- Failing Playgrounds – Task force completed review and prioritized 13 playgrounds for renovation with 2012 GO Bond funds
- Mission Playground – completed
- Palega Playground – completed
- Playfield renovations completed at Minnie and Lovie Ward Playfield, and construction has begun at Beach Chalet Playfields.

Status updates on the RPD Bond projects can be found at: <http://sfrecpark.org/>



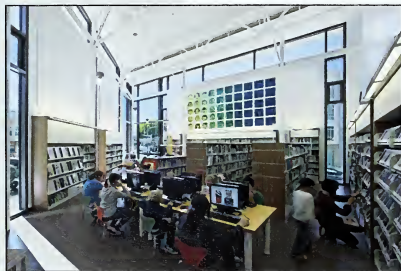
Ortega Branch Library

- Restroom Repairs and Renovations throughout the park system, including Bayview Playground, Larsen Playground Marina Green, and Rossi Playground.
- Sharp Park - a half-acre habitat restoration completed
- Sunset Playground – completed

The 2012 Clean and Safe Neighborhood Parks Bond added an additional \$195 million towards capital improvements for both RPD and the Port and the department continues its mission of improving and enhancing park and playground facilities throughout San Francisco. 15 neighborhood parks and three city wide parks have been developed for planning and construction from 2013 to 2018. This program also includes funding for failing playgrounds and water conservation. In spring 2015 Construction will begin on two of these projects: Gilman Playground and Joe DiMaggio Playground.

Public Library

Following voter approval of \$106 million in G.O. bonds in 2000, the City leveraged the approved bond funds with State grants, gifts, revenue bonds supported by the Library Preservation Fund, and other local sources to finance the \$196 million Branch Library Improvement Program (BLIP).



North Beach Library

BLIP provided seismic, accessibility, and technology upgrades to 24 branch libraries, including 16 renovations, eight new buildings, and one support service center. In the 24 BLIP branches over 48,000 square feet of combined new library space was added and ten new community rooms were constructed. BLIP concluded in May 2014 with the opening of the new North Beach Branch Library.

The specific BLIP accomplishments include the following:

- A new Support Services Center
- City-owned rather than leased facilities at Glen Park, Portola, Ingleside, and Visitacion Valley
- Mission Bay -- the first new branch library in 40 years opened in 2006
- A new North Beach Branch Library, Bayview Branch Library, and a new Ortega Branch Library at the renovated West Sunset Playground
- Branch library renovations at Excelsior, Sunset, West Portal, Marina, Noe Valley, Western Addition, Eureka Valley, Richmond, Bernal Heights, Potrero, Anza, Merced, Park, Parkside, Presidio, and Golden Gate Valley.

Teen Digital Media Lab at the Main Library. In 2012 the San Francisco Public Library (SFPL) initiated the design of a new teen digital media lab at the Main Library with a planning grant from the Institute of Museum and Library Services and the MacArthur Foundation. The collaborative planning process that included the SFPL Youth Advisory Board, Bay Area Video Coalition, the California Academy of Sciences, KQED and SFPL staff resulted an innovative, youth-designed, 21st century learning space for middle and high school-age youth to explore, create and develop digital media and computer skills as well as discover and access the Library's myriad collections of books, media and digital resources. The Teen Digital Media Lab will be known as, "The Mix at SFPL" and will occupy 4,770 square feet on the second floor of the Main Library. Construction of The Mix at SFPL began in Fall 2014 and will be complete in Spring 2015. It will be outfitted with state-of-the-art digital media, video/sound recording, computers and creative maker equipment, allowing teens to expand their imaginations as well as their technology and literacy skills, and engage in individual and team projects that promote critical thinking, inventiveness and skill building.

Literacy and Learning Center – "The Bridge" – at the Main Library. The Bridge at the Main Library is a new literacy and learning center that prioritizes community learning, adult

literacy, youth and family literacy and technology literacy to create a learning environment for 21st Century skills. Construction at The Bridge began in Winter 2013 and was completed in early Fall 2014. The Bridge is home to Project Read, Learning Differences, Veteran's Resource Center (beginning in January 2015), and a public computer training lab.

Arts and Museums

The seismic retrofit of the Veterans Building is well underway, with construction slated to be complete in mid-2015. This project will also bring much needed renovations for the veteran's organizations and others remaining in the building, as well as future art-related functions, including: new exhibition space, public meeting rooms and storage for the civic art collection; a new performance and practice space for the San Francisco Opera; and office space for the Grants for the Arts and the Arts Commission.



Mission Playground

In addition to the Veterans Building renovation, the four Cultural Center facilities, the Asian Art Museum, the de Young Museum, and the Legion of Honor have all seen improvements, thanks to increased funding for renewals and accessibility through the Capital Plan's Pay-As-You-Go Program. For example, enhanced exterior lighting and upgraded monitoring equipment mean increased security at the Asian Art Museum, and a multi-year project to repair various roofing systems is underway at the Legion of Honor.

Academy of Sciences

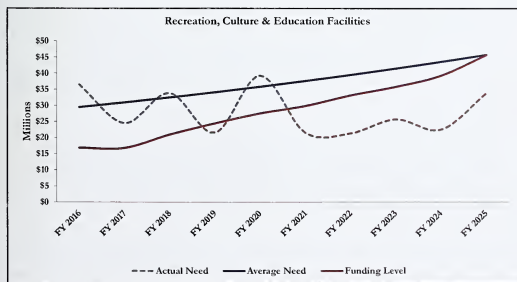
Construction of the \$3.5 million Animal Care and Conservation Facility with off-exhibit spaces for holding, quarantine, and monitoring animal health is nearing completion. This project has enabled the Steinhart Aquarium to meet the Association of Zoos and Aquariums' accreditation standards, enhance conservation and captive-breeding programs, and better house and manage the living collection. This facility is state-of-the-art, with advanced controls, materials, and equipment that maintain the Academy's status as the world's greenest museum, and serve as the foundation for Steinhart and Academy scientists to collect, study, display, and sustain an even greater variety of species.



Tree Planting

1. Renewal Program

The facility renewal model projects a total renewal need of \$410 million over the next ten years to keep primarily General Fund facilities in a state of good repair. Given funding constraints, the Plan allocates \$328 million for Recreation and Culture renewals.





Veterans Building

Recreation and Parks State of Good Repair Renewals. RPD continues to address long outstanding needs to maintain recreation assets in State of good repair. Areas of focus include access and pathways improvements, court resurfacing, irrigation modernization for water conservation, playfield renewal for safety and expanded play hour access and track replacement at Kezar to maintain its state of the art running surface.

Recreation and Parks Deferred Maintenance. A park system as large and diverse as San Francisco's system requires continued and consistent investment. With over 220 parks across 3,000 acres, including 178 playgrounds, 25 recreation centers, 9 swimming pools, and numerous tennis courts, ball diamonds, soccer fields, and other sports venues, and roadways maintaining these heavily used assets can be challenging. Dilapidated playgrounds, worn out playfields, and deteriorating swimming pools all show signs of excessive wear and tear due to a lifetime of use. In addition, aging infrastructure exacerbates existing maintenance challenges, stretching thin already scarce staff and financial resources to deal with inefficient and wasteful irrigation systems, urban forestry emergencies, and outdated playgrounds. A study conducted of the condition of the City's parks reveals that we still have over \$1 billion in capital needs.

Park System-wide Modernization. To bring facilities to modern standards and provide recreational opportunities that meet current and future demand. New investment is needed to modernize the system, increasing open space and recreational opportunities, quality of the experience and increasing the geographic equity as San Francisco's population grows and creates needs in new areas.

Public Art. In addition to facilities, the Arts Commission maintains a collection of over 3,000 public art objects and monuments valued at over \$93 million. The Civic Art Collection received \$395,000 in the FY 2015 Capital Budget, and although maintenance and renewal of these assets has historically been underfunded, this funding combined with an amendment to the City's Art Enrichment Ordinance (AEO) to double the allocation allowed for conservation (from five percent to ten percent), is a strong improvement.



Betty Ong Chinese Recreation Center

The first comprehensive inventory of the art collection was completed in 2014, and an analysis to determine the extent of the collection's renewal and conservation needs is currently underway. This analysis will inform future funding recommendations related to the revenue sources which could be used to support renewals of existing monuments, and city-owned public art. There are various constraints on AEO fund usage – for example, these funds cannot support everyday maintenance and graffiti protection, and can only be invested in assets initially funded by the legislation passed in 1969 (which exclude all of the monuments in Golden Gate Park, among other City landmarks). Given these constraints, it is important to identify diverse revenue sources for the collection's renewal and conservation needs.

Academy of Sciences. The Academy is a key destination that sees heavy usage and wear, as well as a need to renovate or replace exhibits. The Morrison Planetarium, which sees substantial traffic, requires an estimated \$3.5 million in replacements and renovations over the duration of the Plan. The Steinhart Aquarium's Life Support Systems, which have been running continuously since 2007, reach the end of their useful life in FY 2022 and require \$6 million in funding. In addition, interior finishes, plumbing fixtures, and public restrooms are expected to need renewal in the next few years. These items and other renovation projects have difficulty raising outside funding.

Museums. The Asian Art Museum, the de Young Museum, and the Legion of Honor all require significant ongoing maintenance and renewal to maintain their facilities and grounds in good condition to welcome visitors. The facility renewal model projects a total renewal need of \$53 million for these museums over the next ten years. Given funding constraints, the Plan allocates \$38 million for museums.

2. Enhancement Program (FY2016 - FY2025)

Recreation and Parks System Modernization. The Park System-wide Modernization Program brings facilities to modern standards and provide recreational opportunities that meet current and future demand. New investment is needed to modernize the system, increasing open space and recreational opportunities, quality of the experience and increasing the geographic equity as San Francisco's population grows and creates needs in new areas.

The Capital Plan relies on a series of G.O. bonds to help fund the modernization the City's parks and recreation facilities. The 2008 Clean and Safe Neighborhood Parks Bond for \$185 million continues to deliver renovated parks, playgrounds, and recreation centers to the public. In November 2012, voters approved an additional \$195 million in General Obligation Bonds to improve more neighborhood parks, playgrounds, and recreation centers, along with pools, open space, water conservation, forestry, and much needed work on citywide parks. Even with the infusion of funds received by the bonds, significant deferred maintenance and modernization needs remain: the modernization program will continue with a planned 2018 bond.

2008 San Francisco Clean and Safe Neighborhood Parks G.O. Bond.
The status of the 2008 bond program is as follows:

- » **Neighborhood Parks (\$117 million).** The repair and renovation program in the 2008 bond provided a phased approach to implementing projects at 13 sites. To date, ten of these are open to the public: McCoppin Square, Chinese Recreation Center, Mission Playground, Fulton Playground and Sunset Playground, Cayuga Playground, Palega Playground, Lafayette Park, Cabrillo Playground and Glen Canyon Park. Community involvement and funding advanced the Mission Dolores - Helen Diller Playground ahead of the full park project and it opened in 2012. Construction in Mission Dolores Park began in 2014, with 2 phases that will allow the park to remain open and be completely renovated by the end of December 2015. Raymond Kimbell is the last project of the 2008 Bond to go into construction, renovating its facilities while still providing field access and the Playground is scheduled to complete renovations in 2015.
- » **Park Restrooms (\$11 million).** The Restroom Rehabilitation Program Taskforce developed a plan for 18 park sites to be improved with funding from the 2008 G.O. Bond. To date, thirteen of these are open to the public, four are currently being planned, and Portsmouth Square was in construction in late 2014, scheduled to open by spring 2015.
- » **Park Playfields (\$9 million).** The RPD has phased renovations to the City's soccer, baseball, and other playing fields, incorporating state of the art, durable synthetic turf and adding field lights and other field related amenities. Funds from the 2008 G.O. Bond were allocated to three playfields and leveraged matching funds from the City Fields Foundation: the multi-purpose playfield at Minnie and Lovie Ward Recreation Center was completed in early 2014; and the Beach Chalet soccer fields cleared the environmental review process and are under construction during winter 2014.
- » **Park Forestry Program (\$4 million).** The Park Forestry Program addresses critical needs for hazardous tree repair, removal, and replanting. Site-specific tree assessments have been completed in the department's most visited urban forestry areas. The cycle of tree work and replanting (two new trees for every one tree removed) is ongoing and seasonal due to nesting season and weather constraints.
- » **Park Trails Program (\$5 million).** Following a community process, prioritizing access, conservation and safety, ten trails were identified, and repairs and renovations completed.



New Glen Canyon Park



Balboa Skate Park



Marina Yacht Harbor

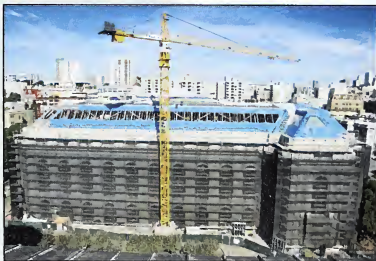
- » **Community Opportunity Grants (\$5 million).** The Community Opportunity Grants Program is a small capital grants program that allows residents, neighborhood groups and park advocates to initiate repairs and improvements in their parks by matching smaller public grants with other private gifts and grants
- » **Community Opportunity Grants (\$5 million).** The Community Opportunity Grants Program is a small capital grants program that allows residents, neighborhood groups and park advocates to initiate repairs and improvements in their parks by matching smaller public grants with other private gifts and grants.

The 2008 G.O. Bond also included \$33.5 million to help develop the Port's waterfront open space system. Bond funding was used to support the following waterfront park projects: the Pier 43 Bay Trail Link, the Brannan Street Wharf Park, the Blue-Greenway Trail and Park system and the Warm Water Cove Park. Details on the 2008 G.O. Bond funded Waterfront Parks Projects can be found in within the Port of San Francisco's section found within the Economic & Neighborhood Development Chapter of this Plan.

2012 San Francisco Clean and Safe Neighborhood Parks G.O. Bond. The 2012 for \$195 million was approved by more than 72 percent of voters. Of this amount, \$99 million is allocated to renovating and repairing 15 neighborhood parks, recreation centers, and pools, \$21 million for improvements to citywide Parks including Golden Gate Park, John McLaren Park, and Lake Merced Park; \$40.5 million for citywide programs including forestry, trails, water conservation, failing playgrounds, and the Community Opportunity Fund for smaller, community-driven projects; and \$34.5 million for waterfront parks and open space (under Port jurisdiction). For current status and a list of projects, please visit: <http://sfrecpark.org/>

ADA Transition Plan. The City created and adopted an ADA Transition Plan in 2004, but in 2010 ADA standards added recreational facilities. RPD is working with the Mayor's Office of Disability to survey all recreation facilities covered by the new standards. Though the full extent and investment needed is still to be determined, based the standards, a significant investment in ground level components is necessary throughout the RPD playgrounds and play areas. The MOD and RPD have cooperatively engaged a consultant to help the City scope and cost the projects required for implementation. In FY 2016, we expect to have an estimate and workplan project implementation.

BLIP Post Occupancy Investment (POI) Program. This program involves a systematic evaluation of internal and external feedback about each library building in use, from the perspective of the people who use them, including both the public and SFPL staff. POI assesses how well buildings match users' needs, and identifies ways to improve building design, performance, and suitability for purpose. POI began in FY 2013, focusing on the branches completed earlier in BLIP.



War Memorial Veterans Building

Veterans Building Seismic Upgrade & Improvements Project. The Veterans Building currently houses the Herbst Theatre, meeting space for local veterans, and City office space. A \$132.5 million project is underway to seismically retrofit, provide life safety and code-mandated improvements, and renovate the facility. Commercial Paper provided funding for the initial planning and design, while COPs fund the construction phase that extends through mid-2015. An additional General Fund contribution of \$1 million in FY 2013 and 2014 supplemented the build out and relocation of the Arts Commission into the newly renovated facility. A contribution of \$6.3 million from War Memorial Special and Gift Funds will fund renovations to Herbst Theatre, and restoration of the 2nd floor Green Room. The San Francisco Opera Association is making an additional \$18 million investment in improvements to the Veterans Building fourth floor, including two new performance/rehearsal spaces for use both by the Opera and other performing organizations. The sale of transferable development rights may offset some project costs in the future.

Academy of Sciences Renovations and Improvements. The Academy is embarking on a \$1 million project to renovate and reconfigure a portion of the Steinhart Aquarium for a new 2016 exhibit.

3. Deferred Projects

Golf Course Improvements. Significant facility upgrades are needed at the City's golf courses. Improvements include the Lincoln Park course with an estimated project cost of \$5 million and Sharp Park with a potential need of \$6 million. Most other courses within the City also require substantial upgrades with the exception of Harding Park, which was updated with a combination of investments from the City, philanthropic donations, and state bond funds.

Recreation & Parks Roads. RPD has no funding capacity to maintain roadways, and estimated costs for basic maintenance (filling potholes, patching, etc.) and grinding and replacing asphalt backlog is approximately \$17 million. Currently, working with SFMTA, RPD has received funding for Mansell Corridor within McLaren Park, which will serve to both enhance accessibility and safety in McLaren and address the deteriorating roadway. The department continues to look for projects with funding opportunities that can improve the roadway infrastructure and enhance parks accessibility.

4. Emerging Needs

The capital investments required for the following deferred projects and emerging needs have not yet been identified. They will be reviewed in subsequent capital plans as additional planning is completed and uncertainty around project-specific issues and funding sources is resolved.

Public Library. With a decade of major renovations behind it, the Library Department plans to identify additional improvements through post-occupancy evaluations at key sites and to move forward with several other initiatives:

- » **Non-BLIP Branch Libraries.** The current BLIP does not include two of the Library's busiest branches: Chinatown and Mission, each renovated in the mid-1990's to meet seismic safety and ADA requirements. However, as community needs for 21st century library services continue to evolve, it is appropriate that these two branches be evaluated for potential renovations to better address current and future library users' needs and accessibility requirements. The Library anticipates launching this evaluation in FY 2018 and potentially beginning the projects in FY 2020. Early project estimates are based on comparable BLIP sites but more detailed estimates will be developed as the project scopes are defined.
- » **Remaining Facilities Plan.** The Public Library is working with the Real Estate Department to plan for the current and anticipated space usage for program and support needs at the Main Library and 190 9th Street and the archival material space needs at Brooks Hall.

Library Materials Sorting Equipment. The Public Library envisions enhancing its library materials sorting process by installing automated materials sorting equipment. Early planning efforts should begin in FY 2017 with project completion in FY 2020. Current estimates of the project are \$1 million for design and construction and \$1 million for the equipment. More detailed estimates will be developed as the project scope is further defined.

The Old Mint. Preliminary work on renovating the U.S. Old Mint has been completed, including hazardous material removal from the building. The overall vision for the historic landmark structure includes a fully restored, multi-use building that houses a vibrant mix of culture and the arts at this important downtown location.

Additional renovations to the building, including structural stabilization, a complete systems overhaul, and tenant improvements, will cost \$100 million. The City is currently working to identify the appropriate mix of public financing, a community partner-lead capital campaign, and other philanthropic and foundation support necessary to meet this need.

Renovations of the City's Cultural Centers. Though the ADA Transition plan funded accessibility improvements at the City's cultural centers, building deficiencies and seismic issues remain. The severity of these facility needs, the cost of renovating the existing sites, and the possibility of relocating to other sites requires additional review and analysis.







Rec Park Emerging Needs. Future Park Bond proposition are expected to go for voter approval to fund the department's extensive modernization needs. Additional funding created by City Planning impact fees are expected to provide some funding for improvements and acquisition and/or development of new parks. Total needs will surpass funding as well as allocation of funding within the projects. Key projects and programs that need funding are:

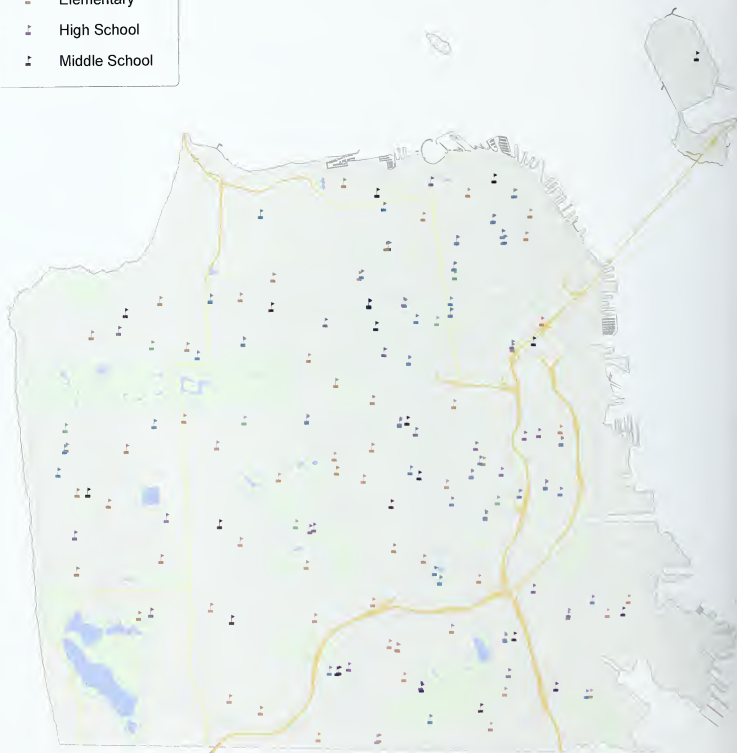
- » Neighborhood Parks – Recreation Centers. St. Mary's, Potrero, and SOMA / Eugene Friend are the last three recreation centers in need of renovation for seismic safety, upgraded access, current use patterns, replacement of failing structures, systems, and play features.
- » Regional Parks - Golden Gate Park and McLaren Park. Although the 2012 bond provides \$9 million to Golden Gate Park (GGP), its aging infrastructure, as well as its roadways and water features, such as the eleven lakes with their original pounded clay bottom, will require other funding sources. John McLaren Park's allocation of \$10 million in the 2012 bond, will require prioritizing when its playgrounds, picnic areas, trails, recreation facilities and water features are renovated. Currently, funding for roadways, which improves access and pedestrian and traffic safety has been awarded through local and regional funding, and RPD continues to look for capital funding opportunities that provide recreation and other benefits and can be funded through innovative partnerships.
- » New Park Acquisitions and Capital Development Needs. The department continues to collaborate with interdepartmental committees and utilize non-open space funds such as Impact and Development fees, grants, and other sources to acquire and develop property in areas in need of additional open space. Recent acquisitions at 900 Innes Ave, Francisco Reservoir, Noe Valley Town Square, and Schlage Lock (2 parcels) will be developed into recreational facilities. While the department prioritizes identifying capital funds for making improvements prior to acquiring open spaces, the growth in properties under RPD will increase capital infrastructure and maintenance expenses. The department will need additional resources for new parks in areas of the city experiencing significant growth, or in areas which have a high need for new open space.
- » Marina Renovation Program. The department is implementing a major program to renovate the San Francisco Marina Yacht Harbor. This includes investments of over \$45 million over the course of the two phase program. Phase 1, West Harbor, consisting of \$27 million in improvements, was completed in early 2013 and was funded through a loan secured from the State's Department of Boating and Waterways, to be repaid with Marina generated revenues. Phase 2, East Harbor (Gas House Cove), began in 2013 and continues, with expected completion in 2015.
- » Seismic Improvements. While many facilities were funded through the 2008 and 2012 bonds, two highly used facilities within the RPD portfolio were not funded and require significant seismic upgrade: Kezar pavilion and John McLaren Lodge. Based on an engineering study, Kezar Pavilion has an estimated seismic need of over \$6 million and the Kezar Stadium track was also identified as having needs, and cost-savings if the projects were done simultaneously. Building needs seismic upgrade to ensure safety for staff and public use. This project is an emerging need and does not have a final cost estimate. John McLaren Lodge, situated at the entrance to Golden Gate Park, requires estimated seismic improvements of \$15 million including improvements to the newer annex (a two-story administrative building directly behind the Lodge), the breezeway which connects both buildings, and an ADA compliant elevator.
- » Water Conservation Program. Through a successful program with the PUC, \$2.1 million in funding has been provided for irrigation upgrades to Balboa Park, Jefferson Square and Alta Plaza. The 2012 bond allocates \$5 million to water conservation and irrigation upgrade needs and the PUC has provided additional funding to Moscone Playground. The reduc-

tion in water usage from these upgrades has provided measurable savings. Despite this program, there still remains a substantial need to bring all of our parks, including Golden Gate Park, up to the City's standard for water conservation and to provide modern, automated irrigation systems.

- » Candlestick Park. As of winter 2014 has been formally transferred to the Lennar Corporation as part of the Hunters Point Shipyard Redevelopment project.
- » SF Zoo. The Zoo is currently undergoing a Master Planning process to analyze current capital needs. While the western side of the Zoo has seen significant improvements in recent years, there are many structures that still need repair and renovation. One such historic structure, called the Mother's Building, was recently awarded a grant for \$106,000 to perform a seismic evaluation and a condition assessment on this charming historic asset. The result of the grant funded work should be recommendations for short term stabilization (to prevent ongoing deterioration) and overall renovation needs. On the eastern side of the zoo, substantial work needs to be performed to upgrade the primate habitat, renovate the lion house, and bear grottoes along with other original structures from the 1920s and 30s. Between these efforts to plan, define, and scope outstanding work, we expect to have vetted estimates for FY 2017 Capital planning process.
- » Camp Mather. This heavily used site needs significant improvements to existing structures, and a modern wastewater treatment facility to meet current environmental standards. Additionally, the site needs a proper wastewater treatment process. The leach field currently in use is not in compliance with National Park Service standards, and as such, our permit to operate the leach field is in jeopardy.
- » Park Concessions. The department has several existing revenue generating properties that are in need of capital improvements. Without needed renovations, the operations and revenue generation at these sites may be jeopardized. In addition, the RPD is interested in re-purposing existing structures so that they can have a dual purpose that includes the provision of park-serving amenities. Lastly, capital improvements should include increasing park infrastructure to be used by events and concessionaires as well as the Department. The City continues to innovate its approach to maintaining its revenue generating properties, as in the case of the Palace of Fine Arts where the City is seeking a lease partnership, and creating a model of use that will reduce the City's maintenance requirements.
- » HOPE SF Emerging Needs. As described in the Health and Human Services chapter, the Mayor's Office of Housing (MOH) is seeking to develop severely distressed public housing sites into mixed income communities. Funding and open space needs at these sites is identified and prioritized and acquisitions will be made as funding is available.
- » Sharp Park. The RPD's safety infrastructure and enhancement project continues with sediment and vegetation removal in the horse stable pond and its connecting channel to the Laguna Salada. Access to the existing pump house will be improved by building a deck and walkway to the pump house to protect frog habitat and relocating a portion of the golf course path to further expand frog habitat. Beyond this project, the park and its surrounding areas will require additional habitat restoration and expansion.

Legend

-  Charter School
-  County School
-  Early Education
-  Elementary
-  High School
-  Middle School



The San Francisco Unified School District (the “District”) is involved in the operations of 156 sites located throughout the City including one facility in La Honda, CA (where a County Community School is located) and two parcels of vacant land.

Highlights and Accomplishments

The District continues to provide substantial capital improvements for its facilities throughout the City, with the majority of the funding to implement these improvements coming from previously approved general obligation bond measures, a seismic-safety parcel tax measure, developer impact fee annual revenues and some limited and now declining matching grants from State facility bond measures. Under the leadership of Superintendent Richard Carranza, the District has launched a major new strategic plan and the “Vision 2025 Initiative”, to focus on increasing student achievement and narrowing the achievement gap. In addition, the District has modified its student assignment system, including new school site attendance zones, significantly revised its student transportation policy and developed a new District-wide technology master plan.



Lincoln High School

Since 2003 the people of San Francisco have approved almost \$1.3 billion of general obligation bonds to modernize and make seismically safe San Francisco’s public schools. In November 2003, voters approved a \$295 million general obligation bond to address modernization needs at 30 school sites, and in November 2006 they approved another \$450 million general obligation bond to modernize facilities at an additional 59 sites. All of the original modernization and new construction projects funded by the 2003 and 2006 bond are substantially complete, with a number of follow-up projects at several sites currently in progress.



New Willie Brown Middle School

In November 2011, voters approved a \$531 million general obligation bond to address the modernization and new school facility needs at 54 additional sites. This work includes the construction of the new 650-student Willie L. Brown Jr. Middle School to replace the former Willie Brown Jr. Academy, which has been demolished. The new middle school is on schedule to open for instruction in the fall of 2015, and design and construction at more than 35 other school sites is currently underway. The District continues to move forward on the proposed renovation of the 135 Van Ness historic site in the heart of the Civic Center arts corridor, for the Ruth Asawa School of the Arts (Asawa SOTA).

In addition to funding capital improvement projects through general obligation bonds, the District’s Mello-Roos Tax was reauthorized in June 2010 for a 20-year period by San Francisco voters. The purpose of the tax is to provide seismic, fire, health and life safety improvements at all facilities, and adequate staffing to maintain and respond to issues of health and safety.

1. Renewal Program

The District is required to prepare a five-year maintenance plan for the State of California, estimating the costs of projects that are categorized as deferred maintenance. As a result of the state-wide reduction in funding for deferred maintenance, more such projects are being

funded through the modernization projects associated with general obligation bonds, as well as alternative funding sources. However, there continue to be immediate projects that must be addressed before future bond proceeds become available. Examples of such work include roof repair, boiler repair and replacement, HVAC and electrical systems, utility infrastructure repair and replacement, fire alarm system installations, and plumbing-sewer repairs. Funding sources for deferred maintenance are expected to remain limited for the duration of this Capital Plan.

2. Enhancement Program (FY2016 - FY2025)

2003 Bond Projects. Of the \$295 million authorized by 2003 Proposition A, \$280 million of bonds have been sold. The remaining \$15 million of bond authorization is reserved for the Asawa SOTA exclusively at the 135 Van Ness historic site, which can only be sold when other raised funds are in place or have been committed. The District anticipates selling the \$15 million of bonds only when a project at the 135 Van Ness site moves forward.

2006 Bond Projects. Of the \$450 million in bonds authorized by 2006 Proposition A, the District has issued \$435 million to date. The final \$15 million of bond authorization is anticipated to be sold along with the next series of 2011 Bonds that are to be issued.

2011 Bond Projects. Of the \$531 million in bonds authorized by the 2011 Proposition A, \$320 million of bonds have been sold, with the remaining \$211 million to be sold in the fall of 2015.



APTOS Middle School

While the District has over \$100 million in matching state facility funding eligibility for the 2011 Proposition A bond sites, and the 135 Van Ness Asawa SOTA project, funding through State Proposition 1D has been exhausted. Without a new state-wide facilities bond proposition being approved by California voters, these reimbursements may remain unfunded. Currently, the District 2011 bond project budgets do not assume contributions from a state facilities bond; although the District continues to apply for any eligible matching grants should a new state-wide bond materialize.

Project	10-year Need (in millions)
Construction, Modernization and Reconstruction	\$361.0
Seismic-earthquake safety improvements	\$50.0
New School Facilities	\$70.0
Technology Upgrades	\$106.7
Food Service Delivery Modifications	\$7.5
Modular Building Replacement	\$36.0
Sustainability and Building Efficiency	\$10.0
Ruth Asawa School of the Arts (including relocation of 135 Van Ness staff)	\$265.0
Deferred Maintenance	\$57.1
TOTAL	\$963.3M

3. Emerging Needs

The District has identified needs totaling \$963.3 million over the next ten years, including deferred maintenance, as shown below. Funding sources to meet these needs amount to \$354.5 million, which assumes that the State of California will place facilities bond measures on the ballot for school financing within the next several years. Without these State funds, the District has identified \$239.5 million in available funding.

In addition, given the growth in the City's economy, The District's student enrollment has been rising and is expected to continue rising for some years to come. The District is updating and analyzing long term demographic projections, and anticipates that increased student demand over the next 10 years may require construction of one or more new schools and expansion of others. The District also hopes to make continued improvements in building efficiency, green building technologies and the use of renewable and sustainable resources.



Lovel High School New Classroom Building

In order to fund the needs discussed above, the District plans to propose one or more general obligation bond propositions during the next ten years totaling up to \$608.8 million or \$723.8 million, depending on the amount of available state funding. This new bond measure is tentatively planned for the November 2016 ballot.

Sources of Funds (\$ in millions)

Sources	2016 and prior	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Developer Impact Fees (Fund 25)	\$7.5	\$4.5	\$4.5	\$3.5	\$7.5	\$7.5	\$7.5	\$7.5	\$7.5	\$7.5	\$65.0
Mello Roos Parcel Tax	\$3.7	\$3.7	\$3.7	\$3.7	\$3.7	\$3.7	\$3.7	\$3.7	\$3.7	\$3.7	\$37.0
Redevelopment Fund	\$1.5	\$2.5	\$2.0	-	-	-	-	-	-	-	\$6.0
Deferred Maintenance Fund	-	\$2.5	\$2.5	\$2.5	\$2.5	\$2.5	\$2.5	\$2.5	\$2.5	\$2.5	\$22.5
Developer Fees for Asawa SOTA	\$9.0	\$3.0	\$3.0	\$4.0	-	-	-	-	-	-	\$19.0
Capital Campaign for ASAWA SOTA	-	-	\$75.0	-	-	-	-	-	-	-	\$75.0
State Matching Funds*	\$30.5	\$38.0	\$7.0	-	\$9.5	-	-	\$20.0	-	\$10.0	\$115.0
TOTAL	\$67.2	\$54.2	\$97.7	\$13.7	\$23.2	\$13.7	\$13.7	\$33.7	\$13.7	\$23.7	\$354.5

* State Matching Funds are projections based on a statewide G.O. Bond, which has not yet been proposed for inclusion on the ballot



Overview and Accomplishments

City College of San Francisco (CCSF) is a community college serving about 75,000 students annually at the main campus, nine Centers, one ground-leased site, and a rented site, all located in the City and County of San Francisco. The total gross square footage of these properties is in excess of 1.8 million square feet.

Since the adoption of its 2004 Facilities Master Plan, the College has implemented several major construction projects including:

- Mission Center
- Wellness Center
- Student Health Services Building
- Multi-Use Building
- Chinatown North Beach Center

Other significant projects include:

- Complete remodel of the John Adams Center
- Extensive ADA related modifications
- Completion of a computer network covering all facilities

With the exception of the Wellness Center which was funded solely with local bond funds, all projects to date have been funded with a combination of State and local bond funds. In 2001 and 2005, voters approved two local bonds which provided the College with approximately \$440 million in funding for both new construction and much needed renovation work.

The only capital funds the College has available at this time, are the funds that have been set aside for constructing the Performing Arts Educational Center (PAEC). There are no other funds available or forthcoming. The State has not run a bond issue for higher education in several years, and has not established a date for the next one. The College has not run

a local bond issue since 2005 and has not established a date for a future bond issue. The State has initiated funding for scheduled maintenance and instructional support, which was eliminated three years ago, and this provides some funding for the College to address deferred maintenance needs.

In November 2012, voters passed two propositions that help alleviate some of the College's recent financial pressures. State Proposition 30 prevented automatic spending cuts to higher education institutions that would have cost the college roughly \$10 million in immediate state funding. Local Proposition A called for a parcel tax on property owners, and is expected to bring in roughly \$14 million in annual revenues for the college over the next eight years.

Facilities Master Planning

The last Facilities Master Plan (2004 – 2014), has guided the College in planning renovation and new construction. The updated Facilities Master Plan (2015 – 2025) will be based on a new planning tool, “The Total Cost of Ownership – Facilities Management Standard”, which outlines plans for decision-making processes related to facilities resources, such as large-scale renovation projects, deferred maintenance project scheduling, new construction, sustainability, project flow, as well as considerations in how priorities and urgencies are calibrated, and clear protocols for routine maintenance and upkeep. In addition, future planning efforts will also be guided by the Five-Year Capital Outlay Plan 2016-2020.

In addition to the above, the following initiatives have helped inform the College's facilities needs:

- Structural engineering study at the College's Civic Center on August 14, 2014
- Engineering analysis of Cloud Hall (Ocean Campus) that examined the scale of work necessary for a seismic upgrade
- Audit and analysis of the Ocean Campus facilities
- Implementation of a process through which faculty and staff can provide input into facility maintenance and needs
- Evaluation of existing classroom capacity

Renewal Program

All California community colleges track their facilities utilization, current and future maintenance needs through the FUSION system. The college's FUSION data was brought up to date during 2013. The FUSION data shows a current capital renewal need of \$139 million and a deferred maintenance backlog of \$192 million. With the elimination of scheduled maintenance funding in FY 2010, as well as no funding from a Statewide Bond initiative, the College has had to rely principally on local bond funds as well as unrestricted General Fund dollars for renewal projects.

Renewal projects already in process include:

- Installation of a new HVAC system in the Arts Extension building on the Ocean Campus
- Replacement of roofs at the Downtown and John Adams Centers
- The repair or replacement of cafeteria equipment at the Downtown Center, and the Ocean Campus
- The repair or replacement of exterior doors at the Ocean Campus

Deferred Needs

Performing Arts Educational Center (PAEC). The only remaining major capital project from the 2004 Facilities Master Plan is the construction of a new Performing Arts Educational Center (PAEC) at the Ocean Campus. This facility would provide a much-needed assembly space for the College, in addition to providing a robust connection to the cultural and performance life of the City.

Funding from local bonds and state matching funds were secured for PAEC in 2011, but recent reprioritization means that reallocation of state funding, and resubmission to the Division of the State Architect (DSA) may be required in order to proceed.

Emerging Needs

The College is currently involved in a comprehensive Facilities Master Planning effort, and any emerging needs identified through this process will be included in future updates of the Capital Plan.

Recreation, Culture, and Education

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	32,615	34,248	35,958	37,766	39,644	230,009	410,228	218,447
SPENDING PLAN								
State of good repair renewal - Proposed Uses	19,872	19,972	24,273	27,933	31,209	204,930	328,189	-
ADA Improvements	3,200	1,600	900	-	-	-	5,400	-
Enhancements	825	800	800	150,300	1,400	167,400	321,525	1,629
TOTAL	23,897	22,372	25,673	178,233	32,609	372,330	655,114	1,629
REVENUES								
General Fund	20,059	18,408	21,552	24,446	27,547	163,684	295,695	-
Park System Renovation and Improvement Bond	-	-	-	150,000	-	150,000	300,000	-
Other Local Sources	3,838	3,963	4,121	3,788	5,062	38,646	59,418	-
TOTAL	23,897	22,372	25,673	178,233	32,609	372,330	655,114	-
Total San Francisco Jobs/Year	200	187	215	1,450	273	3,113	5,477	-

Departmental Breakdown

Arts Commission

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	1,424	1,495	1,569	1,648	1,730	10,039	17,905	7,973

SPENDING PLAN								DEFERRED
State of good repair renewal - Proposed Uses	749	747	931	1,086	1,224	8,161	12,898	
TOTAL	749	747	931	1,086	1,224	8,161	12,898	-

REVENUES							
General Fund	749	747	931	1,086	1,224	8,161	12,898
TOTAL	749	747	931	1,086	1,224	8,161	12,898
Total San Francisco Jobs/Year	6	6	8	9	10	68	108

Asian Art Museum

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	942	989	1,039	1,090	1,145	6,643	11,848	4,529

SPENDING PLAN								DEFERRED
State of good repair renewal - Proposed Uses	497	496	618	721	812	5,415	8,558	
TOTAL	497	496	618	721	812	5,415	8,558	-

REVENUES							
General Fund	497	496	618	721	812	5,415	8,558
TOTAL	497	496	618	721	812	5,415	8,558
Total San Francisco Jobs/Year	4	4	5	6	7	45	72

Fine Arts Museums

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	3,285	3,449	3,622	3,803	3,983	23,166	41,316	20,105

SPENDING PLAN

State of good repair renewal - Proposed Uses	1,535	1,530	1,908	2,226	2,508	16,725	26,433	
TOTAL	1,535	1,530	1,908	2,226	2,508	16,725	26,433	-

DEFERRED

REVENUES

General Fund	1,535	1,530	1,908	2,226	2,508	16,725	26,433	
TOTAL	1,535	1,530	1,908	2,226	2,508	16,725	26,433	
Total San Francisco Jobs/Year	13	13	16	19	21	140	221	

Public Library

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	3,013	3,163	3,321	3,488	3,662	21,246	37,893	-

SPENDING PLAN

State of good repair renewal - Proposed Uses	3,013	3,163	3,321	3,488	3,662	21,246	37,893	
Branch Post Occupancy Investment	825	300	300	300	300	4,200	6,225	-
Non-BLIP site improvements	-	-	-	-	1,100	13,200	14,300	-
SFPL Space Plan	-	500	500	-	-	-	1,000	-
TOTAL	3,838	3,963	4,121	3,788	5,062	38,646	59,418	-

DEFERRED

REVENUES

Other Local Sources	3,838	3,963	4,121	3,788	5,062	38,646	59,418	
TOTAL	3,838	3,963	4,121	3,788	5,062	38,646	59,418	
Total San Francisco Jobs/Year	32	33	34	32	42	323	497	

Recreation and Parks Department

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	22,475	23,599	24,779	25,018	27,319	158,501	282,690	154,641

SPENDING PLAN

Current backlog - Recreation and Parks Roads								
State of good repair renewal - Proposed Uses	13,427	13,387	16,687	19,470	21,939	146,293	231,203	
ADA Renewals - Civic Center Plaza Repairs	700	-	-	-	-	-	-	700
ADA Renewals- 2010 ADA Recreation Facilities	1,000	1,000	-	-	-	1,000	-	2,000
ADA Transition Plan Improvements - Recreation & Parks	600	600	600	-	-	-	-	1,800
Disabled Access - Cultural Facilities	900	-	-	-	-	-	-	900
Parks Systemwide Modernization Program	-	-	-	150,000	-	150,000	300,000	-
TOTAL	16,627	14,987	17,287	165,470	21,939	296,293	536,603	-

REVENUES

General Fund	16,627	14,987	17,287	19,470	21,939	146,293	236,603	
Park System Renovation and Improvement Bond	-	-	-	150,000	-	150,000	300,000	
TOTAL	16,627	14,987	17,287	165,470	21,939	296,293	536,603	
Total San Francisco Jobs/Year	139	125	145	147	163	2,477	4,466	

War Memorial and Performing Arts Center

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	1,477	1,551	1,628	1,709	1,795	10,414	18,574	31,198

SPENDING PLAN

State of good repair renewal - Proposed Uses	651	649	809	943	1,063	7,089	11,203	
TOTAL	651	649	809	943	1,063	7,089	11,203	-

REVENUES

General Fund	651	649	809	943	1,063	7,089	11,203	
TOTAL	651	649	809	943	1,063	7,089	11,203	
Total San Francisco Jobs/Year	5	5	7	8	9	59	94	



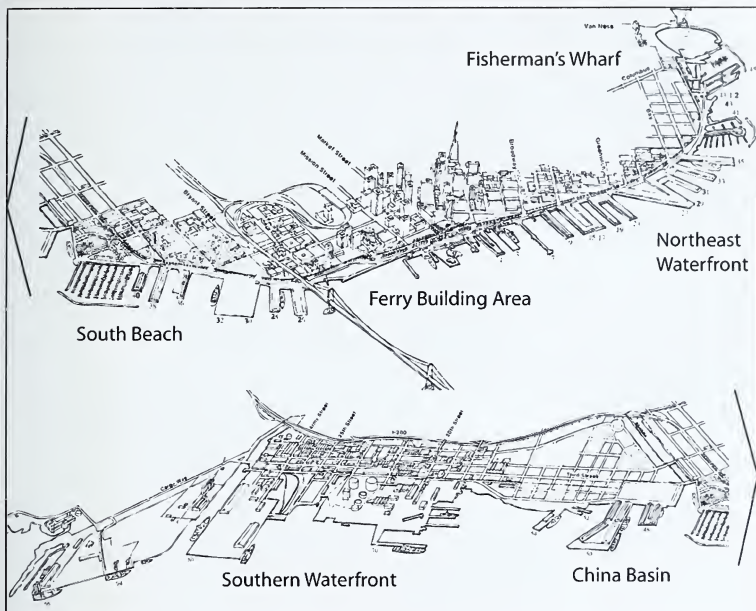
VIII | Economic & Neighborhood Development

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The City operates three convention facilities; owns or has responsibility for 39 pile-supported pier structures and 245 commercial and industrial buildings along the waterfront; and shares responsibility for the redevelopment of nearly 1,400 acres (40% more land area than Golden Gate Park) of formerly industrial or federally-owned land in Mission Bay, Hunter's Point, the Hunter's Point Naval Shipyard, and on Treasure and Yerba Buena Islands. Included in this inventory is not only the land, piers and buildings but also the fixed and long-term infrastructure that support them such as utilities, rights of way, cargo cranes, railroad track, and seawalls.

While many things contribute to the development of the local economy, this chapter includes departments and programs whose primary objective is to contribute to San Francisco's diverse economic base. Real estate at the Port, improvements to the Moscone Convention Center, redevelopment projects in Mission Bay, Treasure Island, and Bayview Hunter's Point, and Planning Department rezoning of neighborhood areas all share the goal of broadening the economic base of the City and creating neighborhoods that have modern infrastructure and are desirable places to live and work. Once complete, these projects will attract residents and businesses to San Francisco, increasing the City's economic competitiveness and expanding its tax base. The Plan identifies a total economic development need over the next ten years of 3.7 billion, primarily for pier and substructure repairs along the waterfront and commercial and residential real estate development on the eastern side of San Francisco.

Port of San Francisco



Port of San Francisco

2014 capped several years of major waterfront transformation with the completion of the James R. Herman Cruise Terminal at Pier 27 and the adjoining Cruise Terminal Plaza, an effort which realized a 30 year Port goal and opened a new chapter in its long maritime history. The facility is expected to serve more than 80 cruise calls per year, bringing 300,000 passengers annually to the City. On non-cruise days, the facility will bring new visitors to the waterfront to enjoy special events in the facility, with 52 events anticipated for 2015.

At the same time, 2014 represented a year of self-reflection for Port staff and the Port Commission. In keeping with the requirements of Proposition H (1990), Port staff conducted a comprehensive review of the Waterfront Land Use Plan ("Waterfront Plan"), the Port's master land use plan, with an eye to identifying land use policy issues that should be updated. This work was informed by the ballot measures adopted by voters to limit Port development and to require voter approval of waterfront height increases, and a 2014 Civil Grand Jury report on the waterfront.

The Draft Review of the Waterfront Land Use Plan was published in August 2014, a report that documents 120 major Port development and capital project accomplishments since 1997, analyzes development projects that were initiated but were not completed to glean lessons learned, and makes preliminary recommendations to the public and the Port Commission on issues that should be considered in any update to the Waterfront Plan. The Port accepted public comment on the Draft Review through November 30, 2014, as the first phase in a broader public outreach effort to update the Waterfront Plan.

A major recommendation of the Draft Review of the Waterfront Land Use Plan is that the Port Commission initiates a public planning effort involving the San Francisco Planning Department, the San Francisco Bay Conservation and Development Commission ("BCDC") and the California State Lands Commission to update the Waterfront Plan. Another significant finding is that, after the Port completes current projects underway (including new neighborhoods at Pier 70 and in Mission Bay), the public-private development partnerships envisioned by the Waterfront Plan are likely to play a decreasing role in funding the Port's 10-Year Capital Plan. While this shift is largely attributable to there being fewer sites to develop, the condition of some Port facilities calls into question the financial feasibility of developing these sites. Moreover, sea level rise has become an added complication, reducing the time available to amortize investment. This finding underscores the need to align the 10-Year Capital Plan and the Waterfront Plan in order to prioritize public and private investment in the waterfront.



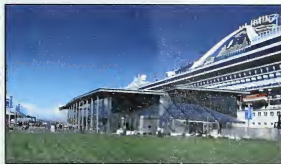
Pier 70 Waterfront Site Market Square Rendering

This year the Port Commission authorized work on perhaps its most significant project of the last century: seismic analysis of the Port's seawall, which defines the City's bay edge from Fisherman's Wharf to AT&T Ballpark. The Great Seawall provides flood protection to four miles of the City's waterfront. The seawall was built in segments over 37 years, starting in 1879, prior to the development of modern engineering to address liquefaction and seismic risks. The purpose of this study is to take a comprehensive look at the earthquake safety of this portion of the waterfront. Securing the seawall has broad ramifications for the Port, the City, and the Bay Area region that includes the following:

- Improving life/safety,
- Protecting lifeline infrastructure including BART and MUNI transportation facilities and the San Francisco Public Utility Commission's utility infrastructure,
- Maintaining the integrity of the historic bulkhead buildings along the Embarcadero,
- Protecting the Embarcadero Promenade and Roadway, and
- Ensuring continued flood protection of low lying Port, City and privately-held land.

The undertaking of major rehabilitation and improvement of such an enduring piece of infrastructure demands a very long view of anticipated conditions. Consistent with the Capital Planning Committee's Guidance for Incorporating Sea Level Rise into Capital Planning in San Francisco: Assessing Vulnerability, Risk and Adaptation, improvements to the seawall also will need to respond to sea level rise.

2014 culminated with San Francisco voter approval of Proposition F, an increase of height limits on the Pier 70 Waterfront Site consistent with the voter approval requirements of Proposition B (June 2014). This voter approval will enable the Port and Forest City California, Inc. to proceed with master planning for this area – and allow the Port to continue addressing the \$51.3 million 10 Year Capital Plan backlog and \$8.4 million of seismic repair at Pier 70.



Cruise Terminal at Pier 27

The FY 2016-25 update of the Port's 10-Year Capital Plan identifies a total need of approximately \$2.1 billion, primarily for deferred maintenance and seismic upgrade work on Port facilities. This is \$115 million more than the \$2 billion identified in the Port's FY 2015-24 update. This net increase is largely the result of better need estimates from the Port's development partners, new FY 2025 costs coming into the plan and annual cost escalation.

Capital Accomplishments FY 2012-13 and 2013-14

2014 marked a year of significant project completion and 2013 witnessed significant construction activity along much of the northern waterfront. The most significant accomplishment for 2014 is the final (Phase 2) construction of the James R. Herman Cruise Terminal at Pier 27. Pier 27 has been developed as the primary cruise terminal to meet modern ship and current operational requirements of the cruise industry. The cruise terminal building is designed to allow for special event and meeting uses when the facility is not occupied for cruise purposes. With construction completed, the new cruise terminal

became operational in September 2014.

Mayor Edwin M. Lee, Board of Supervisors President David Chiu, Port Commission President Leslie Katz and her fellow Commissioners, and Port Director Monique Moyer hosted a civic celebration and official grand opening for the James R. Herman Cruise Terminal on September 25, 2014, with the Grand Princess in port. Phase 1 construction for the core and shell of the building was completed in February 2013; and the building was then used temporarily for 34th America's Cup events ("AC34"). Phase 1 expenditures were approximately \$62 million, including demolition and remediation costs. Phase 2 expenditures of approximately \$49 million brought total costs to approximately \$111 million. Phase 2 covered additional build-out of the cruise terminal building, including the U.S. Customs and Border Protection offices and security rooms; the installation of the mobile gangway system, including a glass-covered passenger boarding bridge and other maritime equipment; completion of a facility operations/provisioning area; fenders and bollards; completion of the ground transportation area; and the Cruise Terminal Plaza, an approximately 2½ acre public open space located along the west end of Pier 27, along the Embarcadero Promenade.

2013 included the following capital accomplishments, totaling \$115.1 million in public investment to Port property:

- **Pier 15 Substructure Improvements.** The Exploratorium, a museum of science, art and human perception, relocated from its former location at the Palace of Fine Arts to Pier 15 and opened to the public in April 2013. The museum raised significant funds to finance repair, rehabilitation, and seismic upgrades to the Pier 15 bulkhead building, shed and connector building. In consideration for completing certain substructure repair and other work, the Port lease granted to the tenant rent credits equivalent to 100% of future Pier 15 minimum rentals due under the lease for the first fifty years. The Exploratorium's total construction costs including new facilities for Bay/Delta Tug and Tow, were \$220 million. The project's substructure work, including seismic upgrades, exceeded \$65 million.
- **AC34 Facility Requirements.** The AC34 Lease Disposition Agreement ("LDA"), executed with the Event Authority on August 14, 2012, required the Port to complete certain infrastructure improvements, certain identified repairs at venue facilities, and to implement certain mitigation measures pursuant to various regulatory and permit requirements. In addition to the expeditious completion of Phase 1 construction of the Pier 27 cruise terminal, the Port incurred costs of approximately \$8.5 million for infrastructure improvements at other facilities including: Piers 30-32 to support the team bases, the south apron of Pier 19, the Pier 29 substructure and an electrical upgrade at Pier 23. Mitigation measures included the installation of shoreside power at the Pier 70 ship repair facility and the disposal of poly-chlorinated biphenyls (PCB) transformers removed as part of the project (\$5.7 million) and the demolition and removal of Pier ½ (\$1.6 million). Approximately \$1.0 million was incurred for dredging to support AC34 event uses. Also required by the LDA, certain smaller capital maintenance and repair projects valued at approximately \$1.0 million were completed in 2013.
- **The Brannan Street Wharf.** Located on The Embarcadero Promenade between Piers 30-32 and Pier 38, the Brannan Street Wharf is a new 57,000 square foot public park over the water and parallel to the Embarcadero Promenade. The Wharf features a neighborhood green, a waterside walkway with seating and picnic tables, a shade structure, and interpretative exhibits about the height of the tide and the site's history. The Port worked at many levels to secure funding from multiple sources to implement this approximately \$26.0 million project (including the demolition and removal of Pier 36). The assembled project funding was insufficient to cover all components of the approved project and, as



Pier 15 Improvements



Brannan St. Wharf

a consequence, construction of a small craft float and gangway was not completed. The Port and BCDC continue to work towards the implementation of acceptable alternatives for adding or expanding water-related recreation opportunities in this or other waterfront project areas.



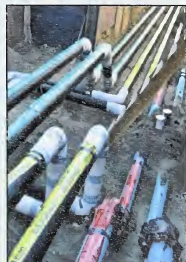
Pier 43 Bay Improvements

- **Pier 43 Bay Trail Link.** The Pier 43 Bay Trail Link was a \$9.7 million Port-sponsored project to create a new waterfront public open space destination in Fisherman's Wharf, along The Embarcadero between Powell and Taylor Streets. The majority of the funding for this project was provided by the 2008 Clean & Safe Neighborhood Parks General Obligation Bond. Project work included: demolition of a condemned pier, construction of a new pile-supported concrete promenade along the water's edge, seawall replacement (520 lineal feet), sidewalk and street improvements, security lighting, and site furnishings.

- **Pier 33½ Improvement Project.** This \$3.5 million project implemented various Port Building Code upgrades, necessary substructure repairs to the Pier 33½ bulkhead building and a new electrical metering and switchboard service to the Pier 33 Shed, as well as North and South Bulkhead Buildings. These improvements converted vacant space into rentable space.

- **Heron's Head Park Improvement Project.** This \$2.4 million project was largely funded by the 2008 Clean and Safe Neighborhood Parks General Obligation Bond and is part of the Blue Greenway. The project expanded the existing Heron's Head Park by converting 58,000 square feet of underutilized asphalt-covered parking area at the entrance into new green space. Project work included: site clearing, grading, drainage improvements, fencing, site paving, landscaping, irrigation, site furnishings, electrical work, a self-composting restroom, and replacement of the main path.

The City has worked with the Fisherman's Wharf Community Benefit District on improvements to the area since 2006. One such improvement, the Jefferson Street Public Realm project improves accessibility for businesses, people, and fishermen who work in the neighborhood as well as for visitors. A ribbon-cutting on June 20, 2013 celebrated completion of the first phase of improvements on Jefferson Street, covering the two blocks from Hyde Street to Jones Street. The improved street area provides twice as much sidewalk space, new two-way traffic configuration to ease traffic congestion and accommodate bicyclists, new lighting and crosswalk bulb-outs for safer crossings in a distinctive decorative roadway. The City is working to secure funding for the next phase which contemplates covering the blocks from Jones Street to Powell Street. Jefferson Street is a City-accepted street, maintained by the Public Works Department.



Pier utility infrastructure

1. Renewal Program

Supplemental Appropriation for FY 2015-16; Port Capital Funds

The Port maintains a 15% operating reserve and allocates 20% percent of operating revenues (25% starting in FY 2017-18) to capital. These two policies combined provide for prudent fund balance in the event of revenue decline, a healthy capital allocation relative to the Port's revenues and a constrained operating budget. Despite these policies, the Port cannot keep up with capital renewal costs let alone address its significant capital backlog because Port net revenues are far less than these costs. To address this long standing structural deficit, the Port has a policy of allocating one-time and surplus revenues to annual capital expenditures. The Port has identified up to \$17 million of one-time revenues for FY 2015-16 which are available for capital projects, most of which is applied to renewal projects. Port staff has issued a call for projects and will evaluate capital projects with the Port's scoring criteria, selecting projects that address safety concerns, reduce liabilities, promote the Port's mission, and preserve and generate additional revenues for the Port. This up to \$17 million in unexpected capital spending will augment the Port's adopted capital budget of \$12.8 million for FY 2015-16.

Over the 10 years of this plan the Port estimates expenditure of \$130 million in Port generated capital funds to address state of good repair needs. These funds will be applied primarily to needs that have no other potential sources of funding.

Development Projects

An even larger portion of the Port's renewal program will be addressed with private funding through partnerships and development projects. Proportionally, the Port's development projects tend to enhancement properties to a greater degree than they bring them into a state of good repair. As an example, the Exploratorium project totaled in excess of \$220 million, with roughly \$65 million needed to bring the substructure into a state of good repair, and the remaining \$155 million invested in enhancements necessary to make the project successful. For this reason, this document engages in discussion around the Port's development projects in the enhancement portion of this document.

2. Enhancement Program (FY2016-2020)

General Obligation Bond Funded Projects

The Port Commission and Port staff remain grateful for the infusion of funding approved by voters to create waterfront open space through the 2008 and 2012 Clean and Safe Waterfront Parks General Obligation Bonds. The following bond-funded projects, totaling \$34.7 million are in various stages of conceptual development and permitting:

Crane Cove Park, Phase 1. Crane Cove Park is an approximately 9 acre Blue Greenway waterfront park located in the Central Waterfront generally between 19th and Mariposa Streets east of Illinois Street. Initial park concepts include shoreline cleanup and stabilization, restoration of historic cranes, historic interpretation, bay access, and a facility for human powered boats. The total cost for the entire project is expected to be \$45 million dollars, which is greater than the current available funding. As a result, the project will be phased as funding is secured. Available funding for the 1st phase of the project is \$24.3 million, including (a) \$10 million from 2008 Clean and Safe Neighborhood Park G.O. Bonds, (b) \$10 million from 2012 Clean and Safe Neighborhood Parks G.O. Bonds, (c) \$1 million from grants from the Metropolitan Transportation Commission and California Coastal Conservancy, and (d) \$3.3 million in other Port funds.



Crane Cove Park Rendering

This Blue Greenway Project benefits from significant planning conducted through the development of the Port's Pier 70 Preferred Master Plan and the Blue Greenway Planning and Design Guidelines community planning process. The Park Master Plan and Schematic Design were approved by the City's Waterfront Design Advisory Committee and the BCDC Design Review Board in July 2014. Phase 1 of the project, comprising approximately 5 acres, will start construction in 2016 and is expected to be complete by 2017.

Bayview Gateway. The \$3.9 million Bayview Gateway Project will create a new one acre public open space along the southern bank of Islais Creek in San Francisco's southeast waterfront. The project site is bound by Islais Creek on the north, Cargo Way on the south, 3rd Street on the west, and Illinois Street on the east. The project will demolish the existing timber wharf, rehabilitate the seawall, and transform the asphalt lot into a public park with walkways, plaza spaces and green spaces from which to enjoy the Bay. In addition, the project will serve as both a gateway to and an amenity for the Bayview neighborhood. The project is under construction, and is expected to be completed in 2015.

Agua Vista Park. The \$2.5 million 20,000 square foot Aqua Vista park within 2,000 linear feet of shoreline access will be renovated and connected to the recently improved edge of Bayfront Park (with 2008 Neighborhood Parks bond proceeds). When completed, Aqua Vista Park and the future Bayfront Park combined are expected to include 2,000 linear feet of new shoreline access, continuous walking and bike paths, and dramatic views of ships

being worked on at the Pier 70 ship yard and dry dock. Improvements may include new pathways, seating areas, interpretation and fishing facility improvements. Aqua Vista is a waterfront park at the southern edge of Mission Bay located on Terry Francois Boulevard at 16th Street that was originally improved in the 1970s. The project is expected to be completed in 2017.

Islais Creek Improvements. The Islais Creek Shoreline Access improvement project is expected to complete the pathway system along the northern shore of Islais Creek from I-280 to Illinois Street. New public access would connect the Islais Creek Promenade at Tennessee Street to the historic Third Street Bridge. Improvements budgeted at \$2 million are expected to include a new waterfront walkway and scenic look out points. This site currently is partially unimproved, but improvements would close a gap in the Islais Creek system of open spaces, the Blue Greenway, and Bay Trail. The project is expected to be completed in 2017.

Warm Water Cove Park. This existing 2 acre park is located along the bay's edge. Currently, it has a walking path, sitting areas, and native shoreline plantings. This park is expected to be renovated and expanded as a bay-side open space for gathering, walking, picnicking and historic interpretation, at a cost of \$1.5 million. Originally improved in the 1970s, the park is in need of new plantings, site furnishings, pathways and lighting. The park also is expected to be expanded to connect with 25th Street to close a gap in the Blue Greenway and San Francisco Bay Trail network. The project is expected to be completed in 2017.

Fisherman's Wharf Plaza. The Port and the San Francisco Bay Conservation and Development Commission are conducting a community planning process to define improvements for a public plaza in Fisherman's Wharf. Improvements will complement the existing Pier 43 Bay Trail Promenade. The area will offer places to sit, picnic or stroll, along with dramatic views of the historic Pier 43 Ferry Arch and Alcatraz Island. The \$1.5 million plaza will be in the heart of Fisherman's Wharf, connecting and expanding upon shoreline open space.

Partnerships and Other Development Projects

Port-Related Referenda and Initiatives. Waterfront development has been affected by recent actions of the City electorate. In November 2013, City voters approved a referendum (Proposition C) overturning a June 2012 decision by the Board of Supervisors to allow the construction of a proposed luxury high-rise residential development along the Embarcadero at Seawall Lot 351 and adjacent private property. The referendum overturned an increase in building height granted to the development by earlier City approvals. By a similar margin, voters rejected a competing measure, Proposition B (2013), which would have authorized the project.

In June 2014, San Francisco voters also approved Proposition B requiring voter approval of increases in heights on Port property. The passage of Proposition B, and the subsequent requirement to seek a height increase for development of Piers 30-32 as a multi-purpose venue for basketball games was one of several reasons the Golden State Warriors purchased private land in Mission Bay for their planned facility and terminated negotiations with the Port regarding development of Piers 30-32.

In November 2014, San Francisco voters approved Proposition F, an increase of height limits to 90 feet on the Pier 70 Waterfront Site consistent with the voter approval requirements of Proposition B, which will enable the Port and Forest City California, Inc. to proceed with master planning for this area.

Seawall Lot 337 and Pier 48. In September 2010, following a one-year community planning and developer selection process, the Port entered into an exclusive negotiation agreement (ENA) with Seawall Lot 337 Associates, LLC (an affiliate of the San Francisco Giants) for the mixed-use development of Seawall Lot 337 (SWL 337) and the adjacent Pier 48. Pursuant to the ENA,



Seawall Lot 337 Rendering

the developer submitted its Revised Proposal in March 2012 which contemplates a flexible mixed-use development at the site balancing residential, office, retail, exhibition and parking uses distributed over a network of city blocks – with expectation that the combination of uses will evolve to meet market demands and to reflect community and regulatory concerns, and be responsive to certain requirements to ensure mixed-use diversity.

In March 2013, the Port Commission endorsed a non-binding term sheet describing the fundamental negotiated elements and proposed financial terms for the lease and development of the project site and, in May 2013, the Board of Supervisors added its endorsement of the term sheet and also found the proposed development to be fiscally feasible under Administrative Code, Chapter 29. Following these approvals, the ENA allows the developer three years to complete the project entitlement process. The total cost of the project, as planned, is estimated at \$1.8 billion.



Aerial of Pier 27 Cruise Terminal

The project team is pursuing project entitlements including a thorough environmental review in accordance with the California Environmental Quality Act (“CEQA”). The Port anticipates that this project could generate new lease revenues and result in higher property values. The project schedule previously anticipated completing the CEQA process and gaining project approvals in early 2015 with lease payments commencing on sub parcels beginning in 2016. However, Proposition B (June 2014) requires voter approval of the height increases required for the project, as proposed (per the non-binding terms endorsed by the Port and City). In light of Proposition B, Seawall Lot 337 Associates, LLC is re-examining the proposed heights and density with the expectation that the Project would be presented to the voters for approval on a future ballot.

Pier 70 Area. Pier 70 is located on San Francisco’s Central Waterfront, an approximately 65-acre site, generally between 18th and 22nd Streets, east of Illinois Street. For over 150 years, some portion of the site has been in use for ship building and repair or steel production, as well as for other supporting heavy industrial uses. The Port completed an environmental investigation and risk assessment of the project area. Findings from the completed risk assessment do not indicate any immediate need for soil or groundwater remediation. Following a three-year community planning process, the Port Commission endorsed the Pier 70 Master Plan in May 2010. The Plan balances sustained ship repair, historic preservation, new waterfront parks and new development. It identifies over 3 million square feet of new building potential and 700,000 square feet of buildings to be rehabilitated. On April 17, 2014, the National Park Service approved the Port’s nomination for the Union Iron Works Historic District at Pier 70 and listed the district in the National Register of Historic Places. Port staff continues to work with the State Lands Commission on public trust matters that impact the Pier 70 area.

The Port Commission authorized a developer solicitation for the Waterfront Site as well as a second solicitation for Historic Buildings:

Pier 70 Waterfront Site. Following a competitive process, the Port Commission selected Forest City California, Inc. as its development partner for the Waterfront Site and on July 12, 2011 authorized an ENA. This project area requires significant infrastructure investment and new land use approvals to redeploy a largely vacant portion of Pier 70 for new uses in new buildings. The ENA provides for a five-year period to develop plans for the project, negotiate required agreements, and secure required approvals. In May 2013, the Port Commission endorsed a non-binding term sheet describing the fundamental deal terms for the project. The Board of Supervisors, in June 2013, added its endorsement of the term sheet and, in accordance with Administrative Code, Chapter 29, determined the proposed development fiscally feasible. Negotiations between the Port and the developer continue on the transaction details and



Ferry Terminal Project concept

documents, including the ground leases, the development and disposition agreement and financing plans.

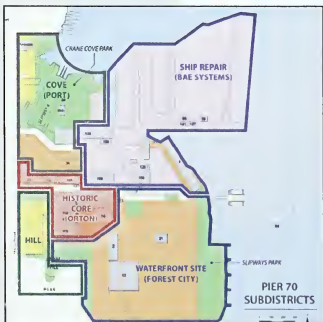
In response to Proposition B, Forest City redesigned its development concept for the Waterfront Site and drafted and qualified Proposition F for voter consideration on the November 4, 2014 ballot. As described above, San Francisco voters approved Proposition F to increase site zoning from 40 to 90 feet, which is not higher than the tallest point at the tallest historic building already at this project site. Subject to all required public review processes, this initiative encourages a development project and sets policy direction for identified major uses and supporting infrastructure improvements. The measure sets forth major uses to include: (i) nine acres of waterfront parks, playgrounds and recreation opportunities on and adjacent to the Project Site; (ii) below market-rate homes, representing 30% of all new housing units; (iii) construction of between approximately 1,000 and 2,000 new housing units, a majority of which will be rental homes; (iv) restoration and reuse of currently deteriorating historic structures essential to the creation of a new Union Iron Works Historic District; (v) substantial new and renovated space for arts, cultural, small-scale manufacturing, local retail and neighborhood services; (vi) preservation of the artist community currently located in the Noonan Building; (vii) between approximately 1,000,000 and 2,000,000 square feet of new commercial and office space (which is in addition to reuse of historic structures); and (viii) accessory parking facilities and other transportation infrastructure.

Forest City's development concept for the Waterfront Site is subject to review and approval under CEQA. Forest City has filed an environmental application for CEQA review which commenced in late 2014, with potential consideration of final transaction documents and a Waterfront Site Special Use District by the Port Commission, the Planning Commission and the Board of Supervisors in 2016.

20th Street Historic Buildings. The 20th Street Historic Buildings are six buildings on or near 20th Street at Pier 70. These historic resources, some dating to the 1880s, are in need of substantial investment to return to active use. Following a competitive solicitation process, in May 2012, the Port entered into an exclusive negotiations agreement with Orton Development Inc. for a public/private partnership to rehabilitate these buildings. In September 2014, the project's Lease Disposition and Development Agreement ("LDDA") was executed. The LDDA is the document that describes the obligations of each party to implement the rehabilitation project including a detailed schedule of performance describing a phased construction schedule.

The Port and Orton Development expect to close escrow and execute a lease to convey the site to Orton by the end of 2014 or early 2015. In total, these buildings have over 250,000 square feet of building space with potential in some cases, for additional mezzanine construction. The current capital cost estimate is \$76 million. The Port will contribute \$1.5 million to the project (repositioning funds previously committed to a temporary shoring of one of the buildings). Orton will invest up to \$14 million of equity in the project and secure the remainder of the funding from leasehold mortgage, historic tax credit investors and a Seismic Safety Loan administered by the Mayor's Office of Housing and Community Development. The Port defers its rent from the project until Orton's equity investment is repaid.

Pier 38 Bulkhead Rehabilitation. Pursuant to Port Commission authorization, the Port issued a request for proposals ("RFP") for the Pier 38 Bulkhead in November 2012, seeking a development entity to rehabilitate the Pier 38 bulkhead building and limited shed improvements for re-occupancy in the near-term. Responses were received in March 2013 and the Port Commission selected TMG Partners in December 2013. Lease negotiations consistent with the Port Commission's goal to expeditiously rehabilitate and re-tenant the bulkhead building are nearing completion. Under the proposed agreement, TMG would invest approximately \$7.2 million to correct code violations, improve public access and upgrade the float on the north side of the pier. The Port expects the lease to



Pier 70 subdistrict concept

commence in early 2015.

Seawall Lot 322-1 Affordable Housing. In March 2014, the Port Commission approved a Memorandum of Understanding (“MOU”) between the Port and the Mayor’s Office of Housing and Community Development regarding a joint effort to pursue an affordable housing development on Seawall Lot 322-1. Port staff obtained state and local legislation authorizing the site to be developed as affordable housing at an effective rent that is below fair market value and entitles the Port to apply the value of the reduced rent as an offset against Jobs-Housing Linkage affordable housing fees that would be triggered by the development contemplated for Pier 70. The MOU allows three years for completing the entitlement process and obtaining project approval and authorizes certain limited time extensions. The affordable housing fee credits realized and other project benefits will be determined through negotiations with the Mayor’s Office of Housing and the non-profit affordable housing developer it selects for this project.

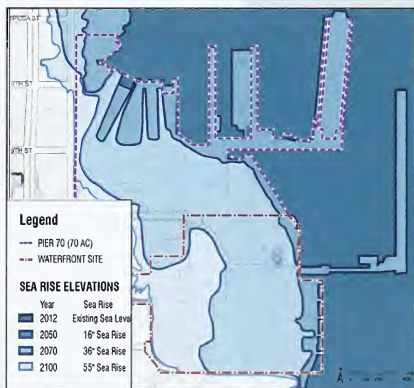
8 Washington/Seawall Lot 351. This two-thirds of an acre site is currently a surface parking lot located along the Ferry Building waterfront at The Embarcadero and Washington Street. It is to be merged with the adjacent 2½ acre tennis and swim club property in a \$345 million residential-commercial development agreement between the Port and San Francisco Waterfront Partners (“SWFP”), including dedicated public parking for the Ferry Building area, improvements to approximately ½ acre of public open space and \$5 million in public funding for sidewalk widening and street furnishings recommended in the Northeast Embarcadero Study (“NES”).

As described above, the approved project is the subject of a recently passed legislative referendum rescinding the increase in building height granted the development. SWFP, therefore, is considering its options to reevaluate the proposed development, including project funding structure. The Port is awaiting the developer’s decision on proceeding with this project following its reevaluation.

Pier 29 Bulkhead Building. Pier 29 was built in 1915 and is a contributing resource in the Northeast Waterfront Historic District. After a June 2012 fire damaged the Pier 29 bulkhead (“Pier 29 Bulkhead Building”) and shed, Port staff led the effort to rebuild the bulkhead building. In 2014, Port staff initiated a discussion with the Port Commission and the Northeast Waterfront Advisory Group regarding a retail RFP for the Pier 29 Bulkhead Building to seek a retail operator or operators that can capture local, regional and International visitor and cruise passenger retail spending as well as provide retail attractive to San Francisco residents year-round. Activating the Pier 29 Bulkhead Building will enhance the Cruise Terminal area for cruise passengers, the neighboring community and invite the visiting public into this newly rehabilitated historic building.

Through the competitive selection process, Port staff proposes to solicit a potential retail tenant(s) to perform all tenant improvements, associated infrastructure improvements and needed health and safety upgrades to the facility. Respondents would be screened for their capabilities and qualifications to undertake these improvements at the Pier 29 Bulkhead Building and continuously operate it as a high quality retail facility. If the Port staff vision for Pier 29 reuse receives positive feedback from the Port Commission, the public and staff from State Lands and BCDC, Port staff intends to return to and seek Port Commission approval of an opportunity and the issuance of an RFP for the Pier 29 Bulkhead Building.

Downtown Ferry Terminal. The Water Emergency Transportation Authority (“WETA”) is now pursuing Phase 2 of the Downtown Ferry Terminal to add up to three new ferry gates, weather-protected areas for queuing, and a new public plaza between the Ferry



Anticipated Sea Level Rise at Pier 70



*Downtown Ferry Terminal
Expansion Rendering*

Building and the Agriculture Building, which also will support emergency staging and evacuation in the event of a major catastrophe. Phase 2, at an estimated cost of \$85 million, will begin as early as 2015 and be completed by 2020.

Pier 96 Bulk Terminal. The Port has been approached by iron ore mining companies, who are undertaking mine projects in Nevada and Utah, to develop a cargo terminal to facilitate the export of their product to China and other Asia markets for the production of steel. The Port additionally has received inquiries to facilitate exporting copper concentrate from mine sites in Nevada and Arizona. Iron ore and copper concentrate would be transported to the Port by train via Union Pacific Railroad. A private Port terminal development partner would finance and develop a traditional-style bulk export facility at Pier 96 utilizing gondola railcars and building storage and conveyance systems for loading the cargo onto ships. A bulk export facility at Pier 96 would incorporate a railcar unloading and conveyance system, a covered storage shed, a covered ship loading conveyance system, and a loop track that allows for trains to efficiently move onto the pier for unloading then back to the rail yard for storage. The Port has retained an engineering firm to work in conjunction with the San Francisco Department of Public Works to complete a detailed geotechnical analysis of the Pier 96 and rail yard sites and complete a design of the bulk export facility based on their findings. This design will be used to identify a private terminal developer and operator through a competitive bid process or sole-source negotiation.

3. Enhancement Program (FY2021-2025)

Crane Cove Park, Phase 2. The \$20 million Phase 2 of Crane Cove Park is an approximately 4 acre site east of slipway 2. The Phase 2 area is the site of former slipways 1-3. Improvements within Phase 2 include: a) shoreline clean up; b) shoreline restoration to create a soft planted shoreline accommodating tidal action; c) a native uplands planting area interspersed with trails and relics from the ship building era, site furnishings including lights, benches and waste receptacles; d) rehabilitation of building 110 for a cafe and public restrooms; and e) improvements to building 109 for a park shelter and site interpretation.

National Park Service Alcatraz Embarkation Site. The National Park Service ("NPS") has approached the Port to consider a permanent land-side home for an NPS welcome center for its many regional destinations in the Golden Gate National Recreation Area while serving as the permanent Alcatraz embarkation site. NPS is seeking a long term property agreement (to be implemented after expiration of its current concession agreement) to eliminate the disruption to park visitors that currently occurs from the periodic relocation of the embarkation site and to provide a venue for park interpretation of Alcatraz and NPS' other destinations. NPS is still considering multiple sites on Port and federal property, including the current Alcatraz landing site at Pier 31½ and the adjacent bulkhead buildings, which would involve substantial capital investments to create a world-class embarkation point.

BCDC-Port Cooperative Planning. As part of the planning and permitting process to entitle the Pier 27 Cruise Terminal project in 2012, the Port and BCDC have been managing a cooperative joint planning process to identify additional public benefit opportunities along the San Francisco waterfront. This work relates closely, and will be integrated with Port efforts to update the Waterfront Land Use Plan. Public benefits include the improvement or creation of new public open spaces and public realm, and improved connections that create continuous public access and enjoyment of the waterfront. One of the priority opportunities is to create landscaped improvements to the Ferry Building Plaza on the bay side of the Ferry Building, where the Farmer's Market occurs every Saturday. It has become a major public gathering space and should be improved to be an attractive addition to the Port's waterfront open space system. Planning work is in the early phases and there is no design yet, or cost estimates. Any significant improvement to create this

public plaza is anticipated to require substantial resources. The Port would evaluate tax increment proceeds from Infrastructure Finance District, tenant contributions, future General Obligation Bond funding, along with grants and other funding options as part of developing an implementation strategy.

Waterfront Land Use Plan Update

As described above, in the wake of several ballot measures adopted by voters to limit Port development and to require voter approval of waterfront height increases, Port staff has initiated efforts to review and update the Waterfront Land Use Plan ("Waterfront Plan") – the Port's guiding policy document – in keeping with the requirements of Proposition H (1990).

Port staff published the Draft Review of the Waterfront Land Use Plan, a report that documents 120 major Port development and capital project accomplishments since 1997, analyzes development projects that were initiated but were not completed to glean lessons learned, and makes preliminary recommendations to the public and the Port Commission about issues that should be considered in updates to the Waterfront Plan. The Port accepted public comment on the Draft Review through November 30, 2014, as the first phase in a broader public outreach effort to update the Waterfront Plan.

Port staff intends to develop detailed recommendations for Port Commission consideration for a public planning effort involving San Francisco Planning Department, BCDC and the California State Lands Commission to update the Waterfront Plan.

Through its 10-Year Capital Plan, the Port has established a process of prioritizing available public funding to finance improvements to Port assets based on criteria established by the Port Commission including return on investment, relationship of the project to the Port's maritime mission, public safety, regulatory requirements, protection of cultural and natural resources, etc. As part of the effort to update the Waterfront Plan, Port staff have begun assembling information and analysis about waterfront-wide issues including the age and construction type of the Port's historic piers, sea level rise, seismic risk, historic character of Port facilities, open space, the public realm and waterfront transportation to enable the Mayor, the Board of Supervisors, the Port Commission and the public to form a consensus about how to guide public and private investment on Port property going forward. Preliminary staff analysis developed to support this effort suggests some major themes:

- There's not that much Port land available for mixed-use development. Much of the Port's 670 acres has been developed for long-term uses or otherwise are dedicated for open space and maritime uses. Approximately 44% of Port property, or 298 acres, is used or reserved for maritime uses. Another 131 acres, or 20%, has been turned into open space, or is planned for open space. 18% of Port property (120 acres) has been developed for mixed uses or is leased. Approximately 8% of Port property (51 acres) is in various stages of planned mixed use development, including two new neighborhoods at Pier 70 and on Seawall Lot 337 in Mission Bay. Port staff has identified an additional 5% of Port property that is still un-programmed, but are likely development sites; another 7% of Port property are "engineering, economic and regulatory challenges" which could or could not be development sites pending further analysis and public dialogue. While there has been significant public focus on waterfront development, as the waterfront matures, development will slow over time, and the Port will require more public funding to address key infrastructure requirements.
- Rising sea levels and the City's future flood protection needs pose a serious challenge to the Port's traditional model of redeveloping finger piers. Some piers are subject to current flood risk in a strong storm (100 Year Flood), and the piers will become more flood prone over time. With rising sea level, the construction window for repair and maintenance of substructure decks of finger piers will become shorter and shorter making it quite expensive to repair and maintain the substructure decks. The concrete degradation due to corrosive marine environment is also expected to accelerate. Considering all these facts, Port staff do not consider additional 66 year leases of the piers

advisable without an identified solution to sea level rise; based on current projections of rising sea levels, 35 (or 30) year leases may be the longest advisable lease term. Lease provisions that allow early termination for sea level rise, or two way options to extend leases with solutions to sea level rise could provide a similar solution. Port staff needs to evaluate solutions to protect piers from flooding, such as flood walls or raised floor elevations. Other approaches to protecting the Port's historic finger piers, such as restoring bulkhead buildings for public use, and keeping pier sheds in light industrial use, should also be investigated.

- Addressing seismic risk to the seawall and the bulkhead buildings that mark the entrance to the Port's piers is a clear priority. The Seawall Seismic Risk Analysis will analyze seismic and liquefaction risk to the Port's seawall in a major temblor on a nearby fault. If the study identifies that the seawall is subject to significant movement during such an event, it could undermine the bulkhead structures along the Embarcadero, and damage utilities and the Embarcadero Roadway, including San Francisco Municipal Transportation Agency transit infrastructure. The study will also provide high level conceptual design solutions to mitigate this risk.
- There is strong public support for the Port to continue its plan implementation efforts at Pier 70 and Seawall Lot 337 in Mission Bay. Due to the Port's public planning efforts that preceded selection of development partners at these sites, and the close collaboration of Port development partners with the community during development master planning, it is clear that there is strong support to continue these development efforts. Both projects incorporate site and design measures to plan for sea level rise. They also will fulfill important community objectives of delivering new open space, rehabilitating historic resources, building new green infrastructure and providing market rate and affordable housing to address the City's housing crisis. The Seawall Lot 337 project will require voter approval of proposed height increases.
- Additional neighborhood planning is needed in the South Beach area and in the Northeast Waterfront at the foot of Telegraph Hill. These neighborhoods have recently experienced development controversy that warrants additional planning to rebuild trust, and are the primary locations where the Port's few remaining mixed use development opportunities exist. These neighborhood planning efforts will examine land use options for under-utilized piers and surface parking lots and related urban design, transportation and historic preservation considerations. The Port Commission has also directed Port staff to develop a Southern Waterfront maritime/eco-industrial master plan based on prior public planning to direct continuing staff efforts to develop its maritime terminals and adjacent backlands.

During the public process to update the Port's Waterfront Plan, Port staff intends to use the lessons learned from the 10-Year Capital Plan to enable the public and policymakers to understand the unique financing and engineering challenges associated with historic waterfront infrastructure and buildings. Developing a clear understanding of the limits of when and where public and private investment can be successful in upgrading existing assets will allow decision-makers to decide when historic assets are truly beyond their useful life, and when the Port should begin envisioning new maritime and public trust improvements that are resilient to sea level rise and can serve coming generations.

4. Deferred and Emerging Needs

Seawall Seismic Risk Analysis. The Great Seawall provides flood protection to four miles of the City's waterfront from Fisherman's Wharf to AT&T Ballpark and is a critical component to maintaining the integrity of the City's utility infrastructure system, the City's regional transportation infrastructure and historic bulkhead buildings that line The Embarcadero. The seawall was built in segments over 37 years, starting in 1879, prior to the development of modern engineering techniques to address liquefaction and seismic risks. The purpose of this study is to take a comprehensive look at the earthquake safety of this portion of the waterfront.

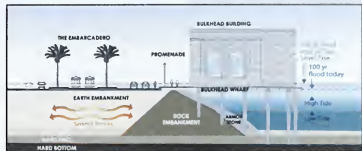
In 2014, the Port Commission authorized an earthquake vulnerability study of the Great Seawall, which was awarded through a competitive process to a Joint Venture between GHD, Inc., an international professional services company with an office in San Francisco, and Geotechnical Consultants, Inc. The purpose of this study is to take a comprehensive look at the earthquake safety of this portion of the waterfront. Specific objectives of the study include:

- Analysis of earthquake behavior of the seawall, bulkhead wharves, and adjacent infrastructure including the Embarcadero Roadway;
- Assessment of earthquake damage and safety risks, including SFPUC, BART and MUNI infrastructure
- Forecast of economic impacts;
- Development of conceptual level earthquake retrofits for the seawall and bulkhead wharves; and
- Prioritization of future improvements and/or further study needs.

Additionally, the study results will assist the Port in planning for and implementing adaptation measures necessary to address sea level rise and climate change. At the early conceptual stage of this effort, Port engineers are suggesting a wide potential range of costs to strengthen the seawall, ranging from \$50 million (for relatively minor strengthening in a few locations) to \$4 billion (for complete replacement). Costs in this range are beyond the port's ability to fund with its own resources, and a combination of sources will likely be required to fund this work, including local, state and federal sources. A major goal of this study is to produce a conceptual seismic design for the seawall and bulkhead wharves that can be incorporated in the City's 10-Year Capital Plan.

Sea Level Rise. In 2011, the Port completed a URS study of sea level rise along the northern waterfront, analyzing potential flooding impacts assuming 16" of sea level rise by 2050 and 55" by 2100. In 2013-14, the Port participated in an inter-departmental task force to assess the potential impacts of climate change on the City. Port staff participated in this effort which developed Guidance for Incorporating Sea Level Rise into Capital Planning in San Francisco: Assessing Vulnerability, Risk and Adaptation. This guide is intended to be a "how to" guide for capital planners, presents the most up to date science on sea level rise and lays out four steps in the process for incorporating sea level rise into capital planning: (1) Science review; (2) Vulnerability assessment; (3) Risk assessment; and (4) Adaptation planning. See Chapter 2 on Resiliency for additional information on this Guidance.

The Port and BCDC also initiated the Mission Creek Adaptation Project as part of an international collaboration between the Netherlands-based Stichting Delta Alliance, several City departments including the San Francisco Public Utilities Commission, the Capital Planning Program, the Planning Department, the Department of Public Works and San Francisco Environment, BCDC and SPUR to develop sea level rise adaptation alternatives for the Mission Creek waterfront area of San Francisco. Mission Creek is one of the City's lowest-lying areas and is vulnerable to flooding from sea level rise. This Project seeks to build the capacity of San Francisco to address the risks of flooding from sea level rise and storms by developing adaptation alternatives for the Mission Creek area and continuing the exchange of knowledge and information between the Netherlands and California. The primary objective of the project is to develop sea level rise and storm water adaptation alternatives for the Mission Creek area portion of the City's waterfront based on the findings of a high-level vulnerability assessment. This study will also provide the Port with concepts that could address future flood risk along Islais Creek and other parts of the waterfront. See Chapter 2 on Resiliency for additional information on this project.



Seismic Risk and Sea Level Rise Analysis

Moscone Convention Center

The Moscone Center consists of three facilities all of which are owned by the City: Moscone South (opened in 1981), Moscone North (opened in 1992) and Moscone West (opened in 2003). Together they draw over one million attendees and exhibitors per year and make a substantial contribution to the \$9 billion in annual economic impact generated by San Francisco's travel and tourism industry.

Between 2010 and 2012, the City completed a major interior renovation and upgrade projects to Moscone North, Moscone South and small portion of Moscone West. These improvements included; more efficient heating, ventilation and air conditioning systems in meeting rooms; 24 newly renovated restrooms; energy efficient lighting upgrades; and wireless system modernizations. The \$56 million project was completed on time and on budget. It also received LEED Gold status for interior renovations.

With the renovations at the current Moscone facilities completed, the City worked with San Francisco Travel (SF Travel) and the San Francisco Tourist Improvement District Management Corporation (SFTIDMC) to make plans to expand the Moscone Center, with the primary goal of creating more contiguous space. In February 2013, the Board of Supervisors voted unanimously to establish the Moscone Expansion District (MED) - a business improvement district encompassing tourist hotels within the City. These hotels have agreed to a self-assessment, based on gross revenue from tourist rooms, that will be combined with City revenue to support the expansion project. Hotels are divided into two zones for this assessment - Zone One is 0.3125%, and Zone Two is 1.25% of gross revenues.

Achievements

The Moscone Center Expansion Project has had robust community outreach efforts. These include Strategic Advisory Group meetings, large community meetings and numerous small individual meetings. In addition to the formation of the Moscone Expansion District, the project achieved the following milestones in February 2013.

- The Board of Supervisors approved the Fiscal Feasibility and issuance of Certificates of Participation
- The SF Arts Commission approved the Civic Design Review Phases 1 and 2
- The SF Planning Commission approved the Final Environmental Impact Report

1. Renewal Program

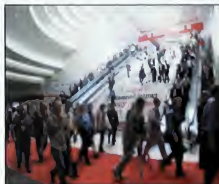
While the Moscone Center Expansion will address numerous renewals over the next few years, significant needs still remain. Some of these needs will be funded by the annual Moscone Expansion District assessment. This contribution starts at one percent of funds collected in the first 10 years (approximately \$200,000 per year) and grows to six percent thereafter (approximately \$1 million per year). The Convention Facilities Fund will provide an additional \$38 million towards renewals over the next 10 years.

2. Enhancement Program (FY2016 - FY2025)

In recent years, the City and SF Travel have been evaluating expansion scenarios to meet existing and future demand for expanded contiguous exhibit space at Moscone South & North. In fall 2009 Economics Research Associates (ERA) conducted a "Feasibility & Economic Impact Analysis for the Proposed Moscone



Moscone Convention Center Exterior



Moscone Convention Center Interior



Moscone North

East Expansion” that concluded: San Francisco would likely see a decline in its convention business beginning in 2018 unless the Moscone Center is expanded to meet anticipated client needs. A 2012 Cost Benefit Analysis by Jones Lang LaSalle Hotels estimates that \$2 billion in direct

spending has already been lost for meetings held between 2010 and 2019. Jones Lang LaSalle also projects that expanding Moscone will have a significant impact on visitor spending within the City. Using five different project scenarios, they project a net economic impact ranging from \$699 million to \$1.4 billion between FY 2012 and FY 2026.

Moscone Expansion. The scope of work adds up to 353,000 sq. ft. of meeting, exhibition and ballroom space, as well as making significant landscaping, urban design, pedestrian safety and streetscape improvements to the surrounding area. The project is estimated to cost \$500 million, and will be funded with City issued COPs scheduled for issuance in fiscal 2017. Revenues from the MED assessments will cover the majority of the debt service cost, although the City will also be responsible for funding a portion of the cost. Once the MCCIP COPs are paid off in Fiscal 2019, the City’s annual required contribution (\$8.2 million - \$10.7 million) to the Moscone Center will be diverted towards debt service on the expansion COPs. The project also calls for City funds beyond the City’s annual required contribution from FY 2019 to FY 2026. The City anticipates using excess revenues from the stabilization fund, prior year deficits, and the sinking fund to cover these costs.

Construction documents for the Moscone Expansion are 50% complete. Phase 1 of construction is scheduled from Spring 2015 to Winter 2016, and Phases 2 and 3 are scheduled from Fall 2015 to Winter 2018.



Office of Community Investment and Infrastructure (Successor to the San Francisco Redevelopment Agency)

The San Francisco Redevelopment Agency, along with all 400 redevelopment agencies in California, was dissolved on February 1, 2012, by order of the California Supreme Court. Pursuant to subsequent State legislation, the Office of Community Investment and Infrastructure was created as the Successor Agency to the San Francisco Redevelopment Agency ("Successor Agency"). The Successor Agency is authorized to continue to implement the Major Approved Development Projects and manage Yerba Buena Gardens and other Successor Agency assets as directed by the Commission on Community Investment and Infrastructure and the Oversight Board of the City and County of San Francisco, until those assets can be disposed of pursuant to redevelopment dissolution law.

The Major Approved Development Projects include the Mission Bay North and South Redevelopment Project Areas ("Mission Bay"), the Hunters Point Shipyard Redevelopment Project Area and Zone 1 of the Bayview Redevelopment Project Area ("Shipyard/Candlestick Point"), and the Transbay Redevelopment Project Area ("Transbay"). The Commission on Community Investment and Infrastructure continues to exercise land use, development and design approval authority as required by the agreements and other enforceable obligations for each project area. In addition, the Successor Agency continues to manage Yerba Buena Gardens, a major recreation, retail and cultural facility within the former Yerba Buena Center Redevelopment Project Area ("YBC").



Aerial schematic of Hunters Point Shipyard/Candlestick Point

as implementing the infrastructure plan, as required by the redevelopment plan and related agreements. Yerba Buena Gardens was constructed between 1993 and 1999 by the former Redevelopment Agency and continues to be managed by the Successor Agency.

The Successor Agency's capital projects are funded by redevelopment tax increment, Mello-Roos special tax revenue, and lease revenue from the Successor Agency's assets in YBC. However, these sources are not sufficient to complete the capital projects required to implement the Major Approved Development Projects and maintain Yerba Buena Gardens. The Successor Agency is currently seeking additional sources of funding for the capital needs of these projects. Below is a description of the Fiscal Year 2015-16 to FY 2024-25 capital programs for the Major Approved Development Projects and Yerba Buena Gardens. Further details of the development agreements underlying these projects can be found on OCII's website at <http://www.sfocii.org>.

1. Hunters Point Shipyard/Candlestick Point

Overview and Accomplishments

The Shipyard/Candlestick Point comprises of nearly 800 acres of abandoned and underutilized land along San Francisco's Southeastern shores. Through a public-private partnership with a master developer ("Lennar Urban") these long-abandoned waterfront lands will be transformed into productive areas for jobs, parks and housing, including affordable

Following the provisions of redevelopment dissolution law, OCII prepared a Long-Range Property Management Plan ("PMP") for the disposition of all real property assets. The PMP was approved by OCII's Commission and the Oversight Board and submitted to the California Department of Finance ("DOF") in November 2013. DOF is currently reviewing the PMP. Among other provisions, the PMP envisions transferring Yerba Buena Gardens to the City and County of San Francisco to be managed for continuing public benefits.

Mission Bay and the Shipyard/Candlestick Point are governed by their respective redevelopment plans and supporting documents and implemented through a series of detailed agreements with their respective master developers. These agreements commit the Successor Agency and all City departments to work together to implement the infrastructure plans for these projects. In Transbay, the Successor Agency is the master developer and is responsible for preparing and selling development parcels as well

housing. The project will deliver nearly \$3 billion in new infrastructure to the City over the course of its 25-year buildout, including 350 acres of new parks, dozens of miles of new roads, a bus rapid transit system, a waterfront promenade, community facilities including a fire station and school site, and more than a dozen new affordable housing sites (see project overview map at end).

The first phase of the Shipyard/Candlestick Point's development is already underway with infrastructure for up to 1,600 homes and 26 acres of open space nearly complete and construction on the first homes began in mid-2013. The balance of the project at the Shipyard will be built as the remaining parcels are transferred from the United States Navy to the Successor Agency. Construction on Candlestick Point is getting underway early next year with the demolition of the Candlestick Stadium site.

Over the expected 15-20 year phased build out, the project entire will include:

- 12,100 residential units, approximately 32% of which will be offered at below-market rates.
- More than 350 acres of new and improved public parks, recreational fields, open spaces and waterfront trails and plazas.
- 935,000 sq. ft. (sq. ft.) of regional and neighborhood-serving retail space.
- 255,000 sq. ft. of new and renovated replacement space for the Shipyard artists, including an arts education center within a new "Arts District" supporting the vibrant artist community.
- More than 3 million sq. ft. of commercial space oriented around office, research and development campus, targeting emerging technologies.
- New public and community facilities on the Shipyard and Candlestick Point including a new fire station and an expanded police station.

The project is divided into phases and subphases which are controlled by several inter-related agreements between the Successor Agency and Lennar Urban. The Interagency Cooperation Agreement, approved in 2010, calls upon the City to expedite and prioritize implementation of the project as a major pillar of its economic development strategy. Funding for the nearly \$3 billion in infrastructure will come from a variety of sources, including private capital, tax increment, and Mello-Roos special taxes. Because the project will not generate sufficient tax increment and Mello-Roos taxes in the early years, the Interagency Cooperation Agreement calls on the Successor Agency and each of the City departments to seek state and federal resources to jumpstart the completion of infrastructure to support the project. A conservative estimate anticipates that 15 percent of the project costs will need to be funded through federal and state sources over the next five years. In subsequent years the local sources described above will become available along with land sales to support the project and less federal and state support will be needed.

Project Funding

The total cost of building the horizontal infrastructure and associated public benefits to lay the groundwork for the phased vertical development of the project is estimated to be approximately \$3 billion, of which \$1.25 billion is expected to come from private capital, with the remaining \$1.75 billion coming from land-secured public financing for public infrastructure and affordable housing. Land-secured tax exempt financing will take the form of (i) the levying of special taxes in designated Community Facilities Districts and the issuance of "Mello-Roos" bonds supported by those taxes, and (ii) the allocation of property tax increment associated with the new property tax revenues and the issuance of tax allocation bonds based on that tax increment.

Enhancement Program (FY2014 - FY2018)

Building 101 & Artists Replacement Studios. Building 101 will be retained as part of the Shipyard redevelopment, and will require significant upgrades in the future. New artist

studios for approximately 100 artists will be constructed.

Community Facility Parcels. Approximately eight acres throughout the Shipyard and Candlestick site have been set aside for community resources such as social services, education, art, public safety facilities and other community services as to be determined through a community process. While \$10 million has been set aside for a new school facility, no other funding sources have been set aside for alternative uses for the community facility parcels.

Building 813. Is being considered for reuse as an incubator and training facility for a range of new businesses, with a likely focus on clean technology, biotech and life sciences, and green businesses, with a mix of office, incubator, and workforce training uses.

Parks and Open Space Facilities. Over the 25 year project period a total of approximately 350 acres of open space will be constructed, as required by the agreements between the Successor Agency and Lennar Urban. More specifically, over the next five years over 26 acres of Phase 1 open space will be completed and approximately 7.6 acres of open space will be completed the Candlestick Point Site Area.

Phase 1 Park and Open Space Projects

- Hillpoint Park
- Innes Court Park
- Galvez Steps
- Coleman Bluffs Paths
- Hillside Central Park

Phase 2 Park and Open Space Projects

- Jamestown Walker Slope
- Wedge Park
- Bayview Hillside Open Space



Bayview Hunter's Point & Candlestick Point Site Plan

Transportation Improvements. The Shipyard/Candlestick Point project includes an extensive program of on-site and off-site transportation improvements to facilitate automobile, transit, bicycle and pedestrian mobility in and around the project area. Over the next five years the Master Developer will build out a new network of streets in the former Candlestick Stadium site to serve a new retail center and the first two blocks of Alice Griffith replacements housings. In addition to new roads the following off-site streetscape improvements are planned for the following existing streets.

- Gilman Street Improvements (from 3rd Street to Arelious Walker Drive)
- Harney Way (between eastern curb of Thomas Mellon Circle and Arelious Walker Drive)

Transit Service: SFMTA has a corresponding transit phasing plan associated with the development of the project. In the next five years transit services frequency will increase for the 56 Rutland and 29 Sunset.

Enhancement Program (FY2019 - FY2025)

Below is an overview of proposed capital projects within the next ten years of the project:

- HPS Fire Station
- Community Facility Parcels

- Parks: Northside Park Horne Blvd. Park Mini-Wedge Park Earl Blvd Park, Waterfront Promenade North/South, Heritage Park, Alice Giffith Neighborhood Park, Jamestown Avenue, Ingerson Avenue. Off-Site Improvements: Innes Avenue, Ingalls, Ingerson, Thomas, Griffiths Carroll and Palou Streets,

Deferred and Emerging Needs

Primary funding sources for the following projects have not yet been identified: Arts Center; Hunters Point Historic Commemoration (landmarks or memorial) of the Drydocks; Community Facilities Parcels; Building 101 Upgrades; Building 813; HPS Fire Station and full funding of a School Site. The Successor Agency envisions that these projects may be funded through a combination of local, state and federal grants or loans; philanthropic funds; master leases or development agreements; or funds derived from the project's "Community Benefits Fund."

2. Mission Bay North and South

Overview and Accomplishments

San Francisco's new Mission Bay development covers 303 acres of land between the San Francisco Bay and Interstate-280. The Board of Supervisors established the project in November 1998. Development is controlled through the Redevelopment Plans and Designs for Development, Owner Participation Agreements between the Successor Agency and the master developer, originally Catellus Development Corporation, now FOCIL-MB, LLC, and Interagency Cooperation Agreements, which commit all City departments to work together to implement the Mission Bay Infrastructure Plans. The Infrastructure Plans outline the scope of infrastructure improvements needed to support the ultimate development that will occur in the Mission Bay area.

The development program for Mission Bay includes:

- 6,400 housing units, with up to 1,850 (~30%) affordable to moderate, low, and very low-income households. OCII sponsored non-profit developers will build up to 1,515 of the affordable units on 14.9 acres of land contributed by the master developer in Mission Bay North and South.
- 4.4 million sq. ft. of high-tech/office/life science/biotechnology commercial space.
- A new UCSF research campus containing 2.65 million sq. ft. of building space on 43 acres of land donated by the master developer and the City.
- A state-of-the-art, 550-bed UCSF medical center serving children, women, and cancer patients.
- 400,000 sq. ft. of city and neighborhood-serving retail space.
- A 250-room hotel.
- 41 acres of new public open space, including parks along Mission Creek and along the bay, plus 8 acres of open space within the UCSF campus.
- A new 500-student public school, new public library and new fire and police stations and other community facilities.

To date, 4,067 housing units, including 822 affordable units, have been constructed in Mission Bay. An additional 900 units are under construction. More than 1.7 million square feet of commercial office and biotechnology lab space has been built, another 219,000 square feet is under construction, and over 2 million square feet is planned / in the design review phase / anticipated in the near future. About 60% of the UCSF campus has been developed, including seven research buildings, a campus community center, and a university housing development. More than 15 acres of new non-UCSF parks and open space have also been completed. The first phase of the UCSF medical center is under construction, and is expected to open in early 2015.

Project Funding

The master developer is in the process of constructing approximately \$700 million in public infrastructure in Mission Bay which is being financed primarily through bonding against special assessments and increased property taxes generated by the development, as well as with grant funding. To date roughly two thirds of this infrastructure has been completed. Upon completion, the right-of-way infrastructure improvements and utility improvements are accepted for operation and maintenance by the City. The Successor Agency operates the park system until 2043, funded by annual assessments against private property in the redevelopment areas.

Enhancement Program (FY2016 – FY2020)

The phasing and timing for all infrastructure in Mission Bay is driven by the rate and phasing of market rate development. After a lag in market development due national economic slowdown starting in 2008, the rate of market rate development in Mission Bay skyrocketed, resulting in immediate needs for additional infrastructure in the next five years. Infrastructure capital improvements in the Mission Bay area can be broken into three major categories: parks and open space, streetscape and underground utilities, and storm water treatment.

Parks and Open Space. There are approximately 15 acres of public non-UCSF open space already developed in Mission Bay, with almost six additional acres on UCSF property, not including publically accessible walkways, totaling approximately 43% of the total 49 acres of public open space planned for the entire Mission Bay area (both UCSF and non-UCSF). Twenty-one additional parks are anticipated to be constructed over the next 10 years, of which 15 are planned for delivery over the next five years. Parks anticipated to be finished by Fiscal 2019 include:

- The remaining segments of the Mission Creek park loop, with an expanded community garden;
- A new children's park and dog park;
- Mariposa parks, to serve the new UCSF Children's hospital and the expanding Dogpatch neighborhood to the south.
- Continuation of the east-west The Commons linear park;
- A small pocket park, fronting the Bay.
- A major bayfront park, reminiscent of Crissy Fields; and
- Two small parks, with passive and active uses.

In addition to the use of special assessment and property tax bonds to reimburse the master developer for their costs to construct the parks, the Successor Agency has received \$960,000 in State Brownfield grant funds in the past for two parks, received \$1.35 million in State Catalyst Community grant funds to assist in the construction of the children's park, and \$2 million in donations have been committed to assist in the construction of Mariposa Park. If additional grant funds or other funding sources are identified, the timing of construction of parks receiving the additional funding would be able to be fast tracked. The phasing of the parks may also be adjusted based on changes in the phasing of the market rate development.

Per the existing Mission Bay Plan, as the parks are completed, they are accepted by the City and maintained until 2043 OCII using fees collected by through Community Facilities District #5 ("CFD #5"). The CFD #5 annual fee is based on the anticipated budget required to maintain the parks, and has a cap of a maximum fee that can be charged. The annual budget includes capital funds needed to maintain the parks in a safe and enjoyable condition for the community.

However, with dissolution of redevelopment agencies, the parks may be required to be turned back to the underlying property owners prior to 2043 once all of the parks are constructed (anticipated to be in approximately 2022). CFD#5 funds will continue to be available for park maintenance until 2043. Once the Department of Finance gives a final determination that OCII is required to return the parks prior to 2043, OCII will work with the community, master developer and underlying owners, primarily comprised of the City, Port and PUC, to determine the best way to transition the parks.

Streetscape and Underground Utilities. While a significant amount of roadways in Mission Bay, along with their underground utility system, have been constructed since 1998, there still remains the need to finalize the improvements to the core infrastructure serving the new residential neighborhood and technology, biotechnology, medical and life science research district in the southern portion of Mission Bay. This infrastructure includes new roadways, underground utilities, highway off-ramp improvements, and pedestrian and bicycle improvements. The majority of these improvements will be constructed over the next five years, and consist of the following improvements:

- Upgrade 16th Street, 3rd Street and Mariposa Street adjoining the new UCSF Medical Center, and construct the 4th Street entry roads at the north and south ends of the Medical Center campus.
- Complete all pedestrian and bicycle connections to the existing light rail stop at Mariposa and 3rd Streets;
- Construct final segment of Owens Street between 16th and Mariposa Streets to connect with Interstate-280;
- Widen the Interstate 280 off-ramp at Mariposa Street;
- Realign and upgrade Terry Francois Boulevard between South Street and 16th;
- Construct and upgrade Illinois Street, 16th Street, 3rd Street, and Terry Francois Boulevard, south of 16th Street;
- Complete the remaining roadways to serve the residential area in Mission Bay South, including Long Bridge, Channel, and Merrimac Streets;
- Install the prerequisite transit infrastructure along Long Bridge Street to accommodate the extension of an electric trolley coach route through Mission Bay's residential area;
- Install a pedestrian bridge across Mission Creek, aligned approximately with 5th Street to the north;
- Upgrade 3rd Street adjoining the future hotel site, between the 3rd Street bridge and Channel Street; and
- Upgrade and realign the streets near the future public safety building (Mission Rock and Terry Francois Boulevard.

A portion of the surface street improvements will receive a share of the \$10 million TIGER IV grant that San Francisco Municipal Transportation Agency (SFMTA) has been awarded.

Storm Water Treatment

The remaining required storm water treatment improvements in Mission Bay are all located in the southern portion of the neighborhood, south of Mission Creek. This southern portion of Mission Bay will have a storm water treatment system separate from the combined sewer/storm water system found in the rest of the City to avoid additional burdens on the Southeast Treatment Facility. The storm water improvements can be broken into the two following categories:

- **Storm Water Pump Stations:** Storm Water Pump Station No. 3 and 5, including storm water pretreatment units, that will discharge treated storm water into the San Francisco Bay. Facilities consist of buried wet wells, above ground control rooms in nearby buildings, PG&E transformers, and outfall structures. Construction of the pump stations is expected to be completed by 2019.
- **Storm Water Treatment Facilities:** Storm water treatment bio-swales and basins are some of the new treatment facilities required to ensure storm water is clean before discharge into the Bay. These will primarily be located in parks, and are anticipated to be constructed within the next five years.

With changing federal and State regulations, storm water in Mission Bay is required to be treated at higher levels than originally anticipated through the use of the treatment swales and basins. As a result, the cost of the storm water system has increased from what was originally anticipated in 1998.

Enhancement Program (FY2021 - FY2025)

Six out of the 21 additional parks to be constructed over the next 10 years will fall within the last five years of the Plan. Parks anticipated to be finished by 2025 are:

- The remaining segments of The Commons;
- A new baseball/softball field; and
- A linear park along the southern section of SWL 337 (may be incorporated into the proposed Mission Rock project).

As with the other parks, if there are additional grant funds or other funding sources are identified, the timing of construction of parks receiving the additional funding would be able to be fast tracked. The phasing of the parks may also be adjusted based on changes in the phasing of the market rate development.

Deferred and Emerging Needs

Mission Bay's financing structure for capital improvement is primarily dependent on the availability of special assessment and property tax funds. A portion of these funds are irrevocably pledged to reimburse the master developer for the significant costs it expends for the development of new public infrastructure. In addition to direct reimbursement from these funds, the Successor Agency periodically bonds against the flow of income from the special assessments and property taxes, reimbursing the master developer with the bond proceeds. With the immense volume of new residential, commercial and UCSF campus and medical center construction underway, there will be a significant need for bonding to finance the construction of the associated infrastructure serving these developments, estimated at approximately \$200 million over the next five years.

A potential need that is emerging is that the CFD#5 fees may not fully cover the maintenance and operation of the Mission Bay park system once the system is fully constructed. The actual cost of maintaining the parks is exceeding the originally estimated amount used to calculate the maximum fee allowed by CFD#5. As a result, there may be limited funds available for capital improvements to the parks as they age and require on-going improvements. This will most likely occur towards the end of this 10 year capital planning period.

3. Transbay

Overview and Accomplishments

This 40-acre project in Downtown San Francisco's Financial District, adopted in 2005, includes the new Transbay Transit Center ("TTC") and 10 acres of former freeway infrastructure, which the Successor Agency and the Transbay Joint Powers Authority ("TJPA") are developing into a new, mixed-use neighborhood surrounding a state-of-the-art, multi-modal transit station. The TJPA is responsible for constructing, owning and operating the new TTC, which is currently under construction and scheduled to be completed in 2017. The TTC will be a modern transit hub accommodating regional bus, light rail, and future high-speed rail service throughout the Bay Area and California. The TJPA is also facilitating the development of a signature, 1,070-foot, 1.35-million-square-foot commercial tower adjacent to the new TTC on Parcel T. More detail on the TTC is provided in Interagency Initiative Chapter within the Transportation Section of this I Plan



Mission Bay Land Use Plan

The Successor Agency is responsible for facilitating the remaining development on the publicly-owned properties within the project area. At full build out, these publicly-owned parcels will be transformed into approximately 3,400 new housing units, including 1,200 affordable units, and more than 3 million sq. ft. of new commercial development. Acting as the master developer for the project area, the Successor Agency is responsible for preparing and selling the publicly-owned parcels and also for planning and constructing a wide range of infrastructure improvements in the project area, including new public parks, new pedestrian-oriented alleys, and widened sidewalks. Folsom Street, which forms the southern boundary of the project area, will become a new neighborhood “boulevard” for Transbay and Rincon Hill to the south, with widened sidewalks and ground-floor retail to activate them.

Project Funding

Most of the projects will be constructed by private developers. The open space, street and right-of-way infrastructure associated with the new development is intended to be funded with tax increment generated within the project area. The amount of tax increment available on an annual basis may not be sufficient to cover the funding requirements within the desired schedule. Under current dissolution law, OCII cannot to issue new debt for the Transbay obligations. However dissolution law may allow for alternative financing arrangements with City sponsorship, to be repaid with available tax increment, subject to State approval.

Enhancement Program (FY2015 - FY2019)

Below is an overview of major Transbay infrastructure projects anticipated to begin over the next five years:

Folsom Street Improvements. Within the next five years, Successor Agency will complete construction of improvements on Folsom Street between Spear and Second Streets, including widened sidewalks with special paving, new street trees and rain gardens, and conversion of the street to two-way traffic. Permanent improvements on the north side of the street will be added as private development occurs on the former freeway parcels. The Successor Agency will construct the improvements on the south side of Folsom Street, except at 201 Folsom Street, where it is anticipated that the private developer will construct the new streetscape consistent with the Successor Agency's designs. The total cost of the Folsom Street improvements is \$20 million and will be funded by tax increment generated within the project area. Construction of improvements is expected to begin in 2015, with completion of all permanent improvements by 2020.

New Public Park (between Howard & Folsom, “Under-Ramp Park”). By 2018, the Successor Agency will complete construction of a new public park under the TJPA and Interstate 80 off-ramps between Howard and Folsom Streets and along the east side of Essex Street. This new, 2.5-acre open space will accommodate a wide range of recreation areas, including plazas, playgrounds, landscaping, public art, exercise equipment, and a dog park. There will also be several retail opportunities, including space for an outdoor “beer garden” as well as traditional indoor spaces for cafés, restaurants, art studios or other small businesses. The park will be built on property owned by the TJPA and the State. Current estimates of the park design and construction costs range up to \$28 million, and is expected to be funded by the future stream of tax increment generated within the project area, assuming OCII is able to capitalize the future revenue stream through City sponsored-bonding, subject to State approval. In financing is secured, c Site work is expected to begin in 2015, with major construction beginning in 2017.

Clementina Street . As the former freeway parcels on the north side of Folsom Street are developed into mixed-use residential projects, Clementina Street will be extended from First Street to Spear Street. This new, pedestrian-oriented alley will be lined with townhouses constructed as part of the master-planned blocks within the project area. The Successor Agency anticipates the new portions of Clementina Street will be privately-owned. The extension of Clementina Street, will be constructed by private developers and funded with tax increment from the project area. The project began in 2013 and will be completed over the next five years. The total cost of the extension of Clementina Street is \$3.0 million. Construction of Block 6 began in 2013, with other blocks following over the next five years. The Successor Agency, in partnership with the SFCTA is reconfiguring the Folsom Street Off-Ramp adjacent to Block 8. The recon-

figuration of the off-ramp will result in the off-ramp ending at a “T” intersection, complete with a new traffic signal and crosswalk, at Fremont Street. Construction of the new off-ramp is underway and will finish in 2015. The total cost of the reconfiguration of the off-ramp is \$3.0 million and will be funded with tax increment.

Enhancement Projects FY2019 - FY2023

The following projects are scheduled to occur within the last five years of the Plan:

New Public Park (between Main & Beale). By 2020, the Successor Agency will complete construction of a new 1.1-acre park north of Folsom Street, between Main and Beale Streets. Once the new TTC is completed in 2017, the temporary facility will be removed and opened up for development. The Transbay plan has programmed the site for approximately 750 new residential units surrounding the new park. Construction of the park is expected to begin in 2018 and cost approximately \$10,000,000 (2014 dollars). The park is anticipated to be funded with tax increment, possibly supported by City-sponsored bonding, subject to State approval.

Sidewalk Enhancements (Main & Beale). As development occurs on the site of the Temporary Transbay Terminal, the sidewalks on both Main and Beale Streets will be widened to create linear parks extending from Mission to Folsom Streets and continuing on into Rincon Hill. The new sidewalks will be widened to 30 feet by narrowing the roadway, which currently has excess capacity. The linear parks will include a variety of program areas, including seating, lawns, planters and other features designed in coordination with the adjacent development. Construction of the widened sidewalks on Main and Beale Streets is expected to begin in 2019 and be completed by 2020 at a cost of approximately \$4.0 million. The widened sidewalks will be constructed by private developers and funded with tax increment from the project area.

Deferred and Emerging Needs

An emerging need for the Transbay project will be funding for maintenance of the new infrastructure, especially the new parks. The Successor Agency is currently participating in an effort to create a community benefit district (“CBD”) that will include Rincon Hill and Transbay. The budget for the CBD will include funding for maintenance of the Transbay parks, including programming for neighborhood events. It is anticipated that the CBD will be formed in June of 2015.

4. Yerba Buena Gardens

Overview and Accomplishments

Yerba Buena Gardens spans a two-block area referred to as Central Block Two (CB-2) bounded by Mission, Howard, Third, and Fourth, Streets to the north, and Central Block Three (CB-3) bounded by Howard, Folsom, Third, and Fourth Streets to the south. The facilities at Yerba Buena Gardens are broadly defined as follows:

- **Exterior Public Open Space Areas** - encompasses all of the landscaped areas, the children's playgrounds, a pedestrian bridge, public restrooms, artwork, fountains and waterfalls, and landscape features;
- **Underground Facilities** - includes underground storage areas, equipment rooms, a loading dock, and site well;
- **Cultural Facilities** - includes the theatre and forum buildings at Yerba Buena Center for the Arts;

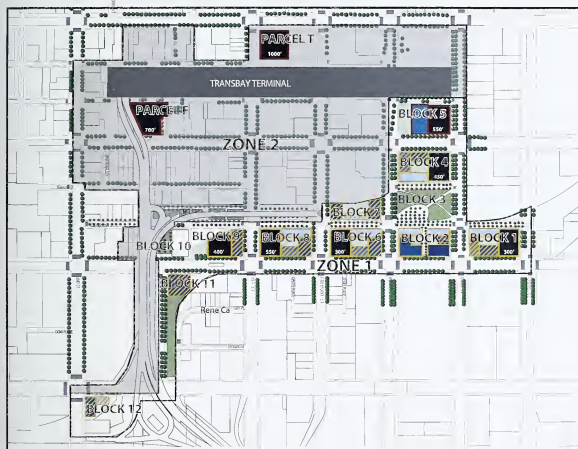


Transbay Terminal Concept

- Other Facilities - includes the East Café building (B Restaurant), the West Café building (Samovar Tea Lounge), and the Yerba Buena Gardens Management Office building; and
- The Children's Center Facilities - includes an ice skating center, a bowling center, a childcare center, the Children's Creativity Museum, and the historic carousel.

Yerba Buena Gardens was constructed by the former San Francisco Redevelopment Agency (between 1993 and 1999) and represents a civic investment of around \$118 million. Yerba Buena Gardens includes commercial and retail properties, cultural facilities, recreational venues (i.e., an ice skating center and a bowling center), a childcare center, and vast amounts of public open space with fountains, terraces, outdoor performance spaces, children's play areas, an historic carousel, public artwork, and many other attractions. This award-winning public open space is host to over 100 public performances, arts events and festivals each year.

Project Funding



Yerba Buena Gardens is currently owned and operated by the Successor Agency to the former Redevelopment Agency, which supports the operations, capital expenditures, and programming of the gardens, the children's facilities. Pursuant to the Property Management Plan submitted by OCII to the State, Yerba Buena Gardens is expected to be transferred to the City in 2015. The Yerba Buena Center for the Arts, and the Children's Creativity Museum through an innovative structure of ground lease payments and annual exactions from major private developments in the area. As required by a federal urban renewal agreement and various governing documents, this funding source is restricted to uses related to maintenance, operations, and security of Yerba Buena Gardens structures, landscaping, and open space, as well as funding for the cultural facilities.

Also, the Successor Agency (like the former Redevelopment Agency) sets aside some of these funds every year for a capital reserve, which is necessary to ensure long-term replacement and renovation of the public facilities at Yerba Buena Gardens.

Yerba Buena Gardens' operating revenues and expenses have typically ranged from \$8 to \$9 million annually over the past few years. The capital reserve has ranged from around \$5 to 7 million. Yerba Buena Gardens were built over the underground Moscone Convention Center so maintaining the waterproofing barriers between the structures of this 20-year old facility has been a significant expense for the Successor Agency over the past few years and

is projected to be an ongoing expense in future fiscal years as the properties continue to age. Therefore, based on the projected capital expenditures over the next ten years, the Successor Agency's capital reserve will not be sufficient to keep up with anticipated facility renewals. Sources of future capital funding have yet to be identified, but may include establishment of public-financing mechanisms, additional contributions from property owners, and/or significant cutbacks in operating and cultural facility expenditures.

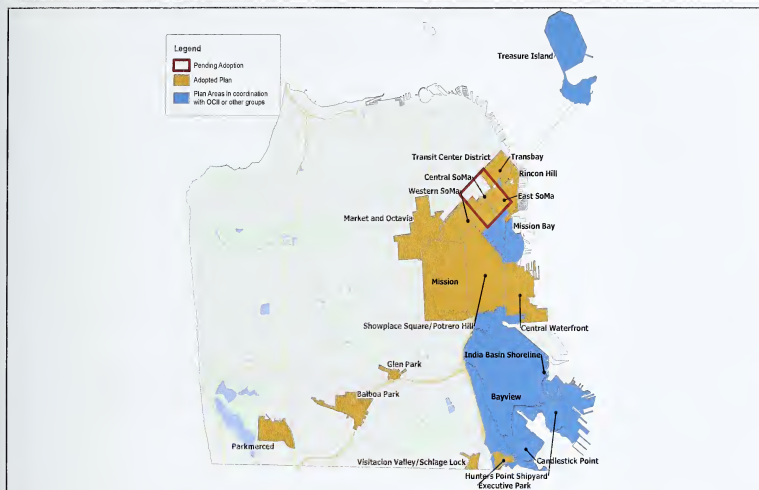
Renewal Program

With the aid of a facilities assessment software program that forecasts long-term capital renewals, the Successor Agency and its on-site property manager, MJM Management Group, have identified \$20.2 million in facility renewal needs for Yerba Buena Gardens over the next ten years. Remaining capital reserves of about \$15.7 million, will fund most of this cost, however, the source of funds for the anticipated shortfall of about \$4.5 million have yet to be identified.

Major anticipated renewals over the next ten years include: (1) roof repairs and/or replacements; (2) electrical, lighting, cooling and fire system upgrades; (3) elevator repairs; (4) boiler replacements; and (5) open space restorations and waterproofing work; among others.

Deferred and Emerging Needs

Yerba Buena does not have any major deferred projects at this time, however, based on projected capital expenditures over the next ten years, the Successor Agency's capital reserve will not be sufficient to keep up with anticipated facility renewals. Sources of future capital funding have yet to be identified, but may include establishment of public-financing mechanisms, additional contributions from property owners, and/or significant cutbacks in operating and cultural facility expenditures.



INTRODUCTION

San Francisco is growing. Plan Bay Area, developed by the Association of Bay Area Governments, projects San Francisco to grow by 90,000 housing units and 190,000 jobs by 2040. San Francisco has already created plans for the majority of this growth – over 95,000 housing units and 140,000 jobs – through various planning efforts, such as Community Plans, Redevelopment Plans, and Development Agreements on major development sites.

This chapter describes the capital needs required to serve San Francisco projected growth, with a focus on the Area Plans that have been adopted by San Francisco within the last 10 years, including Balboa Park, Eastern Neighborhoods, Market and Octavia, Rincon Hill, Transit Center District, and Visitacion Valley.

To off-set the impacts of new growth on San Francisco's existing infrastructure, the City established development impact fees. These fees are programmed through the City's Interagency Plan Implementation Committee (IPIC) with input from each Area Plan neighborhood's respective Citizen Advisory Committee (CAC). The IPIC is chaired by the Planning Department and all IPIC projects are funneled through the capital planning budget process each year.

The City estimates it will raise over \$318 million in area plan impact fees over the next ten years. While this is a significant level of funding, it is insufficient to cover all of the growth-related infrastructure needs. To better understand and address these shortfalls, the Capital Plan now includes detailed, financially constrained 15-year capital plans for the two largest Area Plans – Eastern Neighborhoods and Market & Octavia. Additional plans for other areas will be added in future years as they are developed.

Plan Area or Project	Projected Housing	Projected Jobs
5M	750	4,000
Balboa Park	1,780	725
Candlestick/Hunters Point Shipyard	10,500	10,000
Central SoMa	12,400	50,600
Downtown (C-3 & other non Transit Center)	3,000	5,000
Eastern Neighborhoods	9,000	9,500
Executive Park	1,600	75
HOPE SF (Sunnydale & Potrero)	1800	75
Market and Octavia	5,500	3,000
Mission Bay	3,000	10,000
Mission Rock (SWL 337)	1,000	5,000
Parkmerced	5,700	900
Pier 70	2,000	12,000
Rincon Hill	3,500	75
Transbay Redevelopment & Transit Center	4,500	25,000
Treasure Island	7,000	2,750
Visitation Valley	1,600	500
Western SoMa	2,900	3,200
REST OF CITY	20,000	
TOTAL PLANNED	97,650	143,050
PlanBayArea - TOTAL PROJECTED	92,400	191,000

Area Plans are subsections of the City's General Plan (nearly 1/3 of the City's total land area) that address the specific urban design, open space, transportation, housing, and community facility goals of a particular neighborhood.

The Area Plans identify secured funding sources, unfunded needs that need to be solved, and emerging needs that may need to be addressed in the future. The Plans also include deficits and future needs, as well as an analysis of identified and secured funds. The Plan Area capital plans were informed by the Citywide Infrastructure Level of Service Standards Study completed in 2014. This Study describes an existing average level of service for the city, a short-term target, and a long-term aspirational goal for various types of infrastructure. In general, the Plan Area capital plans use the short-term target to establish the infrastructure needed to serve new population and address existing deficiencies.

Estimates for the Eastern Neighborhoods and Market Octavia capital plans were developed by the Capital Planning Program, the Planning Department, the Department of Public Works, the San Francisco Municipal Transportation Agency, the Recreation and Parks Department and the Mayor's Budget Office. These plans will guide investments and track progress over the next decade and will require adjustments as needs are further vetted and project details (including scope, engineering analyses, environmental review, budget and phasing) – are further defined. An overview of each Plan Area capital plans can be found in the enhancement narrative below.

Implementing departments include those City agencies who build, maintain, and operate public infrastructure, including SFMTA, DPW, Rec/Park and others.)

It is worth noting that these capital plans focus on traditional capital project enhancements, such as streetscape improvements, transit improvements, and recreation or open space improvement. The plans and the impact fee programs also address a broader range of community facilities including childcare facilities. These community facilities are not traditional capital improvements for the City, and are therefore excluded from this analysis. Future planning for these facilities is ongoing with the Planning Department, relevant agencies and the community.

Highlights and accomplishments

Completed projects to serve the Plan Areas include new streetscape and public realm projects, a new child care center, new parks, key transit and bike improvements, and public art. Below are highlights of projects funded in full or in part through impact fees. Note that accomplishments funded outside of the impact fee program are not included in the below lists.

Market and Octavia

- New pedestrian plaza and pedestrian improvements at Market and Dolores Streets, constructed through an in-kind agreement with the adjacent developer.
- Completion of Haight Street transit and pedestrian improvements, enabling the Haight Street bus lines to travel both ways on Haight between Market and Octavia, shaving five minutes from the buses travel times.
- Completion of Polk Street contra-flow bike lane, filling a key gap in the bicycle network
- A rotating public art installation in Patricia's Green Park.

Balboa Park

- Extension of Lee Avenue and Brighton Avenue Public Access Easement, that enable pedestrian access from Ocean Avenue to future development on the Balboa Reservoir site, built through an in-kind agreement with the development project at 1150 Ocean Avenue.
- Completion of Phelan Loop bus terminal, with construction to begin on adjacent plaza in 2015

Eastern Neighborhoods

- Construction began in 2014 on new public realm improvements on Bartlett Street between 21st and 22nd Street
- Potrero Kids Child Care center at 2235 Third Street in the Central Waterfront opened in 2013, built through an in-kind agreement. The 6,200-square foot center provides 66 new child care slots for Central Waterfront and the rest of the City.
- A new park at 17th and Folsom Streets, an Eastern Neighborhoods priority project, is scheduled to begin in 2015.
 - In Showplace Square, a .9 acre new park is currently under construction as part of the development project at 1000 16th Street, paid for through an in-kind agreement.
 - The Recreation and Parks Department identified for the EN CAC and the IPIC a set of approximately eight park rehabilitation and enhancement projects through the five Eastern Neighborhood Plan Areas.
 - Planning is ongoing for infrastructure projects throughout the Plan Areas. SF MTA is about to begin a community engagement process for the designs for 16th Street / 22-Fillmore streetscape and transit improvements in preparation for one of the City's major "Muni Forward" projects.

Rincon Hill

- Completion of Rincon Hill Park at Harrison and Fremont Streets under a permanent public easement.

General

- Planning and Human Services staff created new guidelines that outline a new RFP process to select child care projects that specifically add child care capacity to be funded through impact fee revenue.
- In 2014, two new community-based grant programs were initiated for the Eastern Neighborhoods and Market Octavia Plan areas, funded through impact fees.



Proposed Park at 17th and Folsom

AREA PLAN ENHANCEMENTS (2016 – 2025)

BALBOA PARK

The Balboa Park Station Area Plan was adopted in the spring of 2009. The plan calls for a number of major transportation and public realm infrastructure improvements and 1,780 new housing units. The Balboa Park Station Area differs from other plan areas for several reasons.

First, a significant majority of expected new development is proposed on publicly owned land which gives priority to the development of affordable housing. The plan area also contains few privately owned developable sites. For these reasons the plan is not expected to generate a significant amount of impact fee revenue. The Planning Department projects approximately \$1 million in impact fee revenue in the area through FY 2025. This does not include potential development on the SFPUC-owned Balboa Reservoir. Additional funding is likely to come from Proposition K transportation sales tax, state and federal grants, and other sources.



Balboa Park Station Plan

The Area Plan calls for a number of public infrastructure projects, including significant improvements at the Balboa Park BART and Muni station. SFMTA and BART have identified four phases of station improvements. These are scheduled to be completed in the next ten years depending on funding availability.

The Balboa Park Station Area Plan also calls for realigning freeway ramps, pedestrian and streetscape improvements along Ocean and Geneva avenues, and additional open spaces in the area, including new parks as part of the development of the Balboa Reservoir, and a new open space adjacent to the Ingleside Library.

EASTERN NEIGHBORHOODS (EN)

The Eastern Neighborhoods Area Plans (East SoMa, Western SoMa, Mission, Showplace Square/Potrero Hill, and Central Waterfront) were adopted in 2009, with Western SoMa separately adopted in 2013, and are expected to take 20 years to realize their full build-out. The Plan enables approximately 12,000 additional housing units and 12,500 new jobs, including Western SoMa).

A significant portion of this new development is expected to occur in formerly industrial areas lacking in services and infrastructure necessary for a livable neighborhoods. The Eastern Neighborhoods Implementation Document identified a significant gap in projected revenues and the Plan-identified need. Subsequently, the City formed the Eastern Neighborhoods Infrastructure Finance Working Group (ENIFWG) to identify potential funding sources to fill this gap.

This edition of the Ten-Year Capital Plan newly includes an EN Capital Plan that provides a more comprehensive view of capital investments beyond those funded by impact fees. In addition to projects proposed as part of the Eastern Neighborhoods Area Plans and Implementation Document, this Plan now considers projects within the SFMTA 5-Year Capital Improvement Program, EN Trips, the Mission District Streetscape Plan, the Showplace Square Open Space Plan, and other initiatives such as existing G.O. Bond Programs, Vision Zero/WalkFirst, and Green Connections.

EN Funding

The City currently estimates approximately \$342 million will be needed to serve new growth through 2030. While this represents the 15 year need, the Capital Plan identifies \$299 million (or 87% of the total need) to help meet the need over the next 15 years. Funding sources identified include impact fees, as well as other local funding sources such as General Ob-

ligation Bond revenues and funds from both the San Francisco Municipal Transportation Agency (SFMTA) and Recreation and Parks Department (RPD) capital budgets, among others. However the Eastern Neighborhood Capital Plan is subject to change as capital needs and related project scopes are further refined over the next 15-years.

The City will continue to close the funding gap by exploring all potential future funding sources including, future General Obligation Bonds and grants, as well as future capital budget funds (which at present have yet to be programmed). Planned projects have a funding gap of \$44 million dollars.

EN Emerging Needs

The City has also identified a number of emerging capital projects within the Eastern Neighborhoods Plan Area that are in the early planning stage. The scope, feasibility, and costs of these projects require further vetting and are therefore still considered emerging. Emerging needs range from major streetscape projects which re-envision stretches of the street grid, to Green Connection projects that enhance paths of travel leading to parks and open space. Currently the City estimates \$110 million in emerging needs for Eastern Neighborhoods, however as projects are further developed that number will change.

The below table provides an overview of the Eastern Neighborhoods Plan Area Capital Plan. Note that ‘Other local funding sources’ are funds that have already been programmed within the implementation agency’s (i.e. the department or agency that is responsible for delivering the project) financial tables of this plan, however they are included in the below table to provide a more comprehensive overview of the overall infrastructure investments within the Eastern Neighborhoods.

EASTERN NEIGHBORHOODS CAPITAL PLAN (in \$ millions)							
Fiscal Years 2016-2030							
Improvement Category	15-Year Need	Impact Fees	Other Funding	Total Funding	Funding Gap	Emerging Needs	Emerging Needs + Funding Gap
Streetscapes	73	19	39	58	15	74	89
Green Connections						36	36
Major Transportation Priority Projects	137	38	72	110	27		27
Pedestrian Safety (Vision Zero / Walk First)	14	1	13	14			
Open Space	119	47	70	116	3		3
Total	343	105	194	299	44	110	154

MARKET OCTAVIA (MO)

The Market & Octavia Plan envisions 6,000 new residential units housing 10,000 additional people in the Market and Octavia neighborhood. To accommodate this projected growth, the plan calls for enhancements to parks and open space, streetscape and pedestrian rights of way, and community facilities. These enhancements include the upcoming Van Ness Bus Rapid Transit (BRT) Project, improvements to the 5-Fulton and 71-Haight bus lines as part of Muni Forward, a new open space on Brady Street, a renovation of Hayward Park, new childcare facilities, an ongoing “Living Alley” program, a Green Connection and bicycle facilities on Page Street, and various traffic calming and pedestrian safety improvements at key intersections. DPW, RPD, DCYF, and the MTA will share responsibility for these improvements.

MO Funding

The City currently estimates approximately \$99 million will be needed to complete planned projects to serve new growth in the Market and Octavia Plan Area through 2030. While this represents the estimated 15 year need, the Capital Plan identifies \$75 million (or 76% of the total need) to help meet the need over the next 15 years. Major citywide projects currently in the planning phase - including Better Market Street and the Van Ness BRT - are not included in this total, but represent important infrastructure improvements that will support

additional growth in the Plan Area once implemented. Like the Eastern Neighborhood Capital Plan, the Market Octavia Capital Plan is subject to change as capital needs and related project scopes are further refined over the next 15-years.

The City will continue to close the funding gap by exploring all potential future funding sources including, future General Obligation Bonds and grants, as well as future capital budget funds (which at present have yet to be programmed). Planned projects have a funding gap of \$24 Million dollars, and emerging needs approximately \$17 million.

MO Emerging Needs

The City has also identified a number of emerging capital projects within the Market Octavia Plan Area that are in the early planning stage. The scope, feasibility, and costs of these projects require further vetting and are therefore still considered emerging.

The City will continue to close the funding gap by exploring all potential future funding sources including, future General Obligation Bonds and grants, as well as future capital budget funds (which at present have yet to be programmed).

The below table provides an overview of the Market Octavia Plan Area Capital Plan. Note that 'Other local funding sources' are funds that have already been programmed within the implementation agency's (i.e. the department or agency that is responsible for delivering the project) financial tables of this plan, however they are included in the below table to provide a more comprehensive overview of the overall infrastructure investments within the Market and Octavia plan area.

MARKET OCTAVIA CAPITAL PLAN (in \$ millions)

Fiscal Years 2016-2030

Improvement Category	15-Year Need	Impact Fees	Other Funding	Total Funding	Funding Gap	Emerging Needs	Emerging Needs + Funding Gap
Streetscapes	39	16	5	20	18	9	27
Major Transportation Priority Projects	38		38	38			
Pedestrian Safety (Vision Zero / Walk First)	7	5		5	3	3	6
Open Space	16	12		12	3	5	8
Total	99	33	43	75	24	17	41

Rincon Hill

The Rincon Hill Plan, adopted in 2005, would enable over 2,500 additional residential units in the Rincon Hill neighborhood, situated between Downtown and the Bay Bridge. To accommodate this growth, the Rincon Hill Streetscape Plan includes park and streetscape improvements for this area. Since the Plan's adoption, over 1,050 units have been built, along with several streetscape improvements, open space acquisition and design for Guy Place Park, and required transfers to the SoMa Stabilization Fund.

The Planning Department estimates another \$11.3 million in impact fees will be available between FY16 and FY25 to support improvements in Rincon Hill, including impact fee revenue generated in previous years but not yet spent.¹ This will cover a substantial portion of streetscape and open space improvements in the Plan Area. However, there is a remaining gap of approximately \$21.4 million, which would need to be filled from other revenue sources. In 2011 the Capital Planning Committee and the Board of Supervisors established criteria regarding the use of an Infrastructure Financing Districts (IFD) in area plans with significant upzoning. Subsequently, an IFD for Rincon Hill was established that could potentially cover these costs.

¹ This number excludes approximately \$3.5 million in alley improvements, which were not identified as priority projects through the neighborhood outreach process.

TRANSIT CENTER DISTRICT PLAN

The Transit Center District Plan, adopted in 2012, would enable about 4,800 additional residential units and about 6.5 million square foot of new commercial space (office and retail) near the new Transbay Transit Center. The Transbay Transit Center would serve as the new heart of downtown San Francisco and a new terminus for Caltrain and eventually California High Speed Rail.

The TCDP Implementation Document established a list of infrastructure improvement projects to enhance pedestrian and transit infrastructure to accommodate the forthcoming growth in the Transit Center District as a major regional transit hub.

The TCDP established two impact fees for new development in the Transit Center District: one for open space and a second for transportation. In addition to the impact fees, the TCDP required establishment of a Community Facilities District (Mello-Roos), to fund Phase I of the extension of Caltrain from 4th and King Streets to transit center (DTX) as well as the streetscape and open space improvements. The Transbay CFD will include an additive tax per square foot on properties within the TCDP area plan that will see significant new development (existing buildings would not be required to join the Mello-Roos District).

The City recently adopted the Transbay Community Facilities District, which is anticipated to raise approximately \$800 million. Roughly eighty-three percent of those funds will go toward the Transbay Center and the DTX. It was approved in early 2015.

Since plan adoption approximately 3,070 units and \$2.4 million square footage of commercial space have been entitled by the Planning Department. The Planning Department projects over \$112 million in impact fee revenues available for infrastructure impact fees in the Transit Center District over the next five years. Nearly \$30 million of these impact fees are open space impact fees set aside for open space improvement projects, and the other \$82 million are transportation impact fees set aside for transit and streetscape improvements.

Additional information about the Transbay Transit Center and Downtown Rail Extension is in the Office of Community Investment and Infrastructure (OCII) section within this Plan.

VISITACION VALLEY

The Visitacion Valley impact fee Area includes the Executive Park Subarea Plan, the Visitacion Valley/Schlage Lock development site, and the Sunnydale Housing Authority HopeSF site, which is still in the planning process. These three developments are expected to lead to an increase of 4,800 units, 128,000 square feet of commercial space, and 30,000 square feet of community space.

In 2014, the Schlage Lock site was approved for approximately 1,700 housing units, 50,000 square feet of retail space, and new public infrastructure including two new parks, a new grid of public streets, and community use of the historic office building. Over the next ten years, SF Planning projects approximately \$18 million in fee revenue from FY16-FY25, including in-kind improvements at Schlage Lock.

Other Development Areas

Other types of development areas, including former redevelopment areas and the HopeSF sites, also require infrastructure funding to serve the needs of new populations. These areas are separately addressed in other sections of this report, including the chapters for Housing Initiatives, Office of Community Investment & Infrastructure, and the Transportation Interagency Initiatives.

Treasure Island/Yerba Buena Island Project Area

Treasure Island and Yerba Buena Island (collectively, “the Islands”) are in San Francisco Bay, about halfway between the San Francisco mainland and Oakland. Treasure Island contains approximately 404 acres of land, and Yerba Buena Island, approximately 150 acres. The Islands are the site of the former Naval Station Treasure Island (NSTI), which is still owned by the United States Department of the Navy (Navy). NSTI was closed on September 30, 1997, as part of the Base Closure and Realignment Program.

The former military base consists primarily of low-density residential buildings; vacant and underutilized nonresidential buildings that housed institutional, retail, office, and industrial uses; playing fields and other open space; several designated historic buildings; and several active institutional uses.

There are about 1,005 total dwelling units on Treasure Island and Yerba Buena Island, about 100 buildings with existing and former non-residential uses, parking and roadways, a wastewater treatment facility, and other infrastructure including a number of historically designated buildings. The Islands also include U.S. Coast Guard facilities on Yerba Buena Island, a U.S. Department of Labor Job Corps campus on Treasure Island, and Federal Highway Administration (FHWA) land occupied by the San Francisco-Oakland Bay Bridge (Bay Bridge) and tunnel structures on Yerba Buena Island.

In early 2003, the Treasure Island Development Authority (TIDA) and the Treasure Island Community Development, LLC (TICD) entered into an Exclusive Negotiating Agreement and began work on a Development Plan for the Islands. After several years of work, the TIDA Board and the Planning Commission certified the Environmental Impact Report (EIR) for the project and approved various project entitlements in April 2011, including amendments to the Planning Code, Zoning Maps and General Plan, as well as a Development Agreement, Disposition and Development Agreement and Interagency Cooperation Agreement. These entitlements include detailed plans regarding land uses, phasing, infrastructure, transportation, sustainability, housing, including affordable housing, jobs and equal opportunity programs, community facilities and project financing, and provide a holistic picture of the future development. In June 2011, the Board of Supervisors unanimously upheld the certification of the project’s EIR and approved all necessary project entitlements.



In July of 2014, TIDA and the Navy entered into an Economic Development Conveyance Memorandum of Agreement (EDC MOA) establishing the procedures for transfer of the property from the Navy. The initial transfer, encompassing roughly two-thirds of the total area to be transferred will occur in early 2015, and the balance of the property to be transferred in phases with the last transfer scheduled to occur in 2022.

Development activity will begin in late 2015 or early 2016, upon the TIDA approval of TICD's Major Phase and First Sub-Phase Applications describing the horizontal infrastructure to be constructed in the first phase. The first residential units are expected to be completed and offered for sale by mid-2018, and the complete build-out of the project is anticipated to occur over fifteen to twenty years

Project Funding Sources

The funding for development will come primarily from a combination of private capital, including proceeds from land sales, and land-secured tax financing. The Financing Plan establishes the agreement between the Developer and TIDA for the use of taxes generated by the Project Areas to finance public improvements and other costs permitted by law through Infrastructure Financing Districts (IFDs). The public improvements include Infrastructure described in the Infrastructure Plan and affordable housing, described in the Housing Plan. The Financing Plan also provides for the creation of Mello-Roos Community Facility Districts Act under which special taxes will be levied against private property (excluding TIDA affordable housing parcels), to finance public improvements and other costs permitted by law.

Enhancement Program (FY 2016 – FY2023)

The Treasure Island / Yerba Buena Island Development Project includes up to 8,000 residential units (25% of which would be available at below market rates); up to 140,000 sq. ft. (sq. ft.) of new commercial and retail space; up to 100,000 sq. ft. of new office space; adaptive reuse of about 311,000 sq. ft. for commercial, retail, and/or flex space uses in the historic buildings on Treasure Island; up to approximately 500 hotel rooms; rehabilitation of the historic buildings on Yerba Buena Island; new and/or upgraded public facilities and public utilities; about 300 acres of parks and public open space including shoreline access and cultural uses such as a museum; new and upgraded streets and public ways; bicycle, transit, and pedestrian facilities; landside and waterside facilities for the existing Treasure Island Sailing Center; landside services for an expanded marina; and a new Ferry Terminal and intermodal Transit Hub.

Construction and build-out of the project is anticipated to occur over an approximately 15- to 20-year period in four major phases each comprised of several smaller sub-phases. The first phase of horizontal infrastructure construction should begin in late 2015 or early 2016 and will include the some vertical construction of residential units and extensive horizontal infrastructure (street & right of way, public utility, and open space infrastructure) improvements to enable subsequent phases of vertical construction (facility infrastructure).

The Project will pay the costs of completing the "horizontal" development and other Project-related costs using private capital and public financing generated by the Project itself. Total project costs are estimated to be approximately \$1.52 billion and include:

- Completing all pre-development planning and entitlement work, including engineering, urban design and land planning, architectural, legal and financial work, market and feasibility studies and environmental review under CEQA;
- The costs associated with the geotechnical improvements, initial improvements to addressing potential future sea level rise, and conducting necessary environmental remediation, as well as associated soft costs and management costs;



- Replacing and/or building the backbone wet and dry utilities, including a low-pressure potable water system, a reclaimed water system, new sanitary sewer and storm drainage facilities, and joint trenches throughout the area to accommodate electrical, communication, and gas utilities;
- Preparing infrastructure and delivering sites for affordable housing developments in developable condition with all of the requisite infrastructure and paying subsidies, as required in the Housing Plan, for vertical construction of Authority affordable housing to include housing for formerly homeless families and individuals (TIHDI Housing);
- Completing public open space improvements including public access trails, parks, shoreline improvements and other waterfront improvements to enhance public use, and enjoyment of views of the San Francisco Bay;
- Building public transportation improvements, including a new ferry terminal, lease payments for new ferry boats, and the cost to purchase or lease shuttle buses for the new on-island free shuttle service;
- Completing the renovation of Buildings 1, 2, and 3 consistent with the Secretary of the Interior Standards for rehabilitation and a subsidy of the initial phase of retail development before it is financially viable to ensure that core neighborhood serving retail uses are developed in the early phases of the project;
- Satisfying any other requirements necessary to prepare Treasure Island for vertical development;
- Providing space and funding for new and improved community facilities;
- Funding for the ongoing operations and maintenance of public parks and public open space as further detailed above and in Draft Open Space Plan; and
- A transportation operating subsidy to enhance funding for the project's unique transit services and transportation demand management programs as defined by the DDA and Transportation Plan.

As previously mentioned, funding for the development will come primarily from a combination of private capital including proceeds from land sales and land secured tax financing.

Emerging Needs

The below capital needs are currently being evaluated:

Utility Infrastructure. The SFPUC and TIDA are working together to identify a scope of work and funding sources for capital improvements to maintain the existing utility systems over the next 10 years. These improvements are thought to be necessary in order to provide a minimum level of service reliability during the interim period before new infrastructure is constructed, dedicated to and accepted by the City as part of the Treasure Island Development Project. While the full scope and costs of these improvements are still being determined, funding sources outside of the Treasure Island / Yerba Buena Island Development Project will need to be identified.

Yerba Buena Ramps. The improvement and/or replacement of the other ramps on the east side of the Yerba Buena Island tunnel is under study by the San Francisco County Transportation Authority (SFCTA) and Caltrans. Those agencies and FHWA are conducting environmental review to satisfy NEPA and the California Environmental Quality Act (CEQA).

requirements. This project, if undertaken, would be a separate from both the Bay Bridge East Span project currently under construction and the Proposed Project.

Yerba Buena Tunnel. A retrofit of the viaduct structures on the west side of the Yerba Buena Island tunnel is also underway by the San Francisco County Transportation Authority and Caltrans. Those agencies and FHWA will conduct environmental review to satisfy NEPA and CEQA requirements for that project.



- Replacing and/or building the backbone wet and dry utilities, including a low-pressure potable water system, a reclaimed water system, new sanitary sewer and storm drainage facilities, and joint trenches throughout the area to accommodate electrical, communication, and gas utilities;
- Preparing infrastructure and delivering sites for affordable housing developments in developable condition with all of the requisite infrastructure and paying subsidies, as required in the Housing Plan, for vertical construction of Authority affordable housing to include housing for formerly homeless families and individuals (TIHDI Housing);
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Emerging Needs

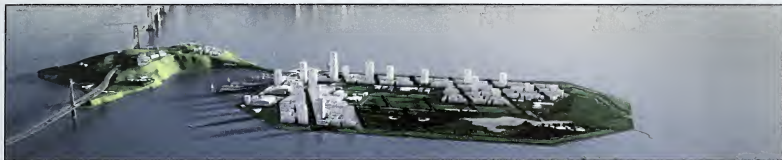
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Economic & Neighborhood Development

Program / Project	Prior Years	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN									DEFERRED
Port of San Francisco	-	120,863	89,687	118,892	102,491	49,330	436,773	980,036	1,011,522
Moscone Convention Center	-	9,000	484,930	3,000	3,000	3,000	17,406	520,336	-
Transbay Joint Powers Authority	-	12,800	3,450	33,750	16,250	4,250	2,500	73,000	-
Yerba Buena Center	-	3,958	2,894	2,507	1,568	-	7,767	20,256	-
Mission Bay Redevelopment	-	147,020	37,210	26,505	8,604	13,265	17,224	249,828	-
Treasure Island Redevelopment	207,556	130,581	115,440	151,159	135,975	113,885	557,074	1,204,115	-
Hunters Point Redevelopment	-	66,605	32,365	38,506	48,065	65,956	332,547	584,063	-
Planning Department	57,564	45,588	65,075	113,850	23,682	15,240	61,808	325,243	-
TOTAL	285,120	536,416	631,052	486,168	399,656	266,487	1,435,099	3,956,877	1,011,522
REVENUES									
Convention Facilities Fund		9,000	3,000	3,000	3,000	3,000	17,406	36,406	
Local - Other Sources		9,358	8,994	5,607	1,568	1,561	3,217	30,306	
Park System Renovation and Improvement Bond		11,362	13,880	844	-	-	35,000	61,066	
Commercial Paper		-	67,480	-	-	-	-	67,480	
Certificates of Participation		-	331,810	-	-	-	-	331,810	
Port Funds & Tenant Responsibility		93,638	52,632	102,619	121,641	46,814	348,589	766,132	
Moscone Expansion District Assessment		-	82,530	-	-	-	-	82,530	
Land-Secured Financing (TIF, IFD, Mello Roos)		101,478	39,669	101,612	183,958	183,310	697,074	1,307,101	
Private Capital		115,253	76,710	150,317	108,306	79,962	584,333	1,094,881	
Planning Department Area Plan Sources		39,204	53,301	116,654	16,316	15,059	94,640	335,173	
Federal and State		25,874	23,673	13,674	44,612	6,781	64,636	179,250	
TOTAL		405,165	753,989	494,325	479,402	336,487	1,924,894	4,284,264	
Total San Francisco Jobs/Year		3,387	6,303	4,133	4,008	2,613	15,256	35,900	
Annual Surplus (Deficit)		(131,249)	(77,062)	6,157	79,746	70,001	389,795	337,388	
Cumulative Surplus (Deficit)		(131,249)	(208,312)	(202,155)	(122,408)	(52,408)	337,388		

Departmental Breakdown **Port of San Francisco**

Program / Project	Prior Years	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN									DEFERRED
State of Good Repair									
Emergency Facility Repair		100	100	100	100	100	500	1,000	
ADA		-	100	100	100	100	500	900	
Dredging		18,800	6,000	6,000	6,000	6,000	30,000	72,900	
Emerging Needs		-	-	-	-	-	-	-	
Repair / Reinvestment		76,005	49,475	38,805	50,645	23,120	296,576	534,628	
State of Good Repair Subtotal		95,005	55,675	45,005	56,845	29,320	327,576	609,328	
Enhancements									
Parks and Open Space		10,510	12,639	760	-	-	32,375	56,504	
Facility Improvements		5,948	5,675	3,769	4,550	4,897	22,009	47,748	
Development Project Areas		-	5,298	59,637	62,496	15,114	33,511	176,056	
Ferry Terminal Expansion Project		9,400	10,200	9,700	38,600	-	22,400	90,300	
Enhancements Subtotal		25,657	34,013	73,887	105,646	20,010	111,196	370,608	
TOTAL		120,663	89,687	118,892	162,491	49,330	438,773	980,036	1,011,522
REVENUES									
Port Capital Budget		32,350	15,500	14,700	17,500	17,900	82,400	180,350	
Port Revenue Bonds and COPs		1,193	-	-	-	-	40,000	41,193	
Park System Renovation and Improvement Bond		11,362	13,880	844	-	-	35,000	61,086	
Federal & State Grants		2,013	3,775	2,029	2,250	2,517	12,584	25,168	
Federal Railway Administration		2,800	-	-	-	-	-	2,800	
US Army Corps of Engineers		250	7,000	-	-	-	20,200	27,450	
DTFT - State Proposition 1B		5,400	6,100	10,300	38,600	-	22,400	82,500	
DTFT - Local Sources (RM2)		5,400	6,100	3,100	-	-	-	14,600	
Port Tenant Improvements		29,400	5,500	8,900	29,400	13,800	162,900	249,500	
Development Projects		30,695	31,632	79,019	74,741	15,114	63,689	295,089	
TOTAL		120,663	89,687	118,892	162,491	49,330	438,773	980,036	
Total San Francisco Jobs/Year		1,010	750	894	1,358	412	3,668	8,193	

Moscone Center

Program / Project	Prior Years					FY 2021 -		
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 -	2025	Backlog
State of good repair renewal - Need	9,145	9,603	10,053	10,587	11,116	64,495	115,031	-
SPENDING PLAN								
State of good repair renewal - Proposed Uses	9,000	3,000	3,000	3,000	3,000	17,406	38,406	-
Moscone Convention Center Expansion	-	481,930	-	-	-	-	481,930	-
TOTAL	9,000	484,930	3,000	3,000	3,000	17,406	520,336	-
REVENUES								
Convention Facilities Fund	9,000	3,000	3,000	3,000	3,000	17,406	38,406	-
Certificates of Participation	-	331,810	-	-	-	-	331,810	-
Commercial Paper	-	67,490	-	-	-	-	67,490	-
Moscone Expansion District Assessment	-	82,630	-	-	-	-	82,630	-
TOTAL	9,000	484,930	3,000	3,000	3,000	17,406	520,336	-
Total San Francisco Jobs/Year	75	4,054	25	25	25	146	4,350	-

Transbay Joint Powers Authority

Program / Project	Prior Years					FY 2021 -		
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 -	2025	Backlog
SPENDING PLAN								
Planning and Design	750	750	750	750	750	-	3,750	-
Folsom Boulevard Improvements	8,000	2,000	-	-	-	-	10,000	-
South Side Permanent	1,500	-	2,250	-	-	1,000	4,750	-
North Side Permanent	-	-	-	-	-	-	-	-
New Alleyways	-	-	750	-	-	750	1,500	-
Clementina bet. First & Fremont Sts	750	-	-	-	-	-	750	-
Clementina bet. Fremont & Beale Sts	-	-	-	-	750	750	1,500	-
Tehama bet. Beale & Main Sts	-	-	-	750	-	-	750	-
Natoma bet. Beale & Main Sts	-	-	-	-	1,750	-	1,750	-
Main, Beale & Spear St. Improvements	-	-	-	1,750	1,000	-	2,750	-
Howard Street Improvements	-	-	-	-	-	-	-	-
Folsom Street Off-Ramp Reconfiguration	1,000	-	-	-	-	-	1,000	-
New Open Spaces	-	-	-	-	-	-	-	-
Under-Ramp Park	800	700	28,000	-	-	-	29,500	-
Essex Street Open Spaces	-	-	1,000	4,000	-	-	5,000	-
Main/Beale Park	-	-	1,000	9,000	-	-	10,000	-
TOTAL	12,800	3,450	33,750	16,250	4,250	2,500	73,000	-
REVENUES								
Tax Increment Bond Proceeds	12,800	3,450	33,750	16,250	4,250	2,500	73,000	-
TOTAL	12,800	3,450	33,750	16,250	4,250	2,500	73,000	-
Total San Francisco Jobs/Year	107	29	282	136	36	21	610	-

Yerba Buena Center

Program / Project	Prior Years	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN									DEFERRED
Exterior Public Open Spaces		1,627	20	-	-	-	2,338	3,995	
Underground Facilities		58	87	-	24	637	548	1,354	
Cultural Facilities		869	39	1,618	359	-	1,446	4,330	
Other Facilities		214	550	173	173	507	2,351	3,967	
Children's Center Facilities		1,190	2,189	717	1,013	417	1,084	6,610	
TOTAL		3,953	2,894	2,507	1,568	1,561	7,767	20,256	-
REVENUES									
YBC Restricted Lease Revenues		847	787	723	654	581	1,622	5,213	
YBC Capital Reserve Fund		3,112	2,107	1,784	914	980	1,595	10,483	
TOTAL		3,959	2,894	2,507	1,568	1,561	3,217	15,706	
Total San Francisco Jobs/Year		33	24	21	13	13	27	131	

Annual Surplus (Deficit)

Cumulative Surplus (Deficit)

-	-	-	-	-	-	-	(4,550)	(4,550)	
-	-	-	-	-	-	-	(4,550)	(4,550)	

Mission Bay Redevelopment

Program / Project	Prior Years	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN									DEFERRED
Parks and Open Space		8,472	15,102	5,601	988	423	12,517	43,104	
Streetscape and Underground Utilities		33,355	8,632	13,867	2,443	7,674	1,354	67,324	
Storm Water Treatment		5,521	7,416	1,309	-	-	382	14,637	
Other Public Infrastructure Costs		9,145	6,050	5,728	5,173	5,168	2,961	34,235	
Prior Unreimbursed Capital Expenditures of Master Developer		90,527	-	-	-	-	-	90,527	
TOTAL		147,020	37,210	26,505	8,604	13,265	17,224	249,828	-

REVENUES

Mello Roos Bond (CFD) Proceeds	1,452	1,478	1,510	1,537	1,571	8,333	15,879	
Tax Increment Financing	55,887	3,659	22,334	24,995	6,665	43,153	156,673	
State and Federal Funds	5,600	3,250	-	-	-	-	8,850	
TOTAL	62,919	8,387	23,844	26,532	8,235	51,486	181,402	
Total San Francisco Jobs/Year	526	70	199	222	69	430	1,517	

Annual Surplus (Deficit)

Cumulative Surplus (Deficit)

(84,102)	(28,824)	(2,661)	17,928	(5,029)	34,262	(68,426)	
(84,102)	(112,925)	(115,586)	(97,658)	(102,688)	(68,426)		

Treasure Island Redevelopment

Program / Project	Prior Years	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN									DEFERRED
Property Acquisition/Assumption	5,500	7,875	7,700	7,425	7,150	6,875	24,750	61,875	
Infrastructure Costs	82,584	97,657	80,772	92,231	75,928	64,623	280,080	691,292	
Other Costs (Marketing, Project Management, et al.)	118,035	21,244	21,519	43,831	44,744	32,645	185,635	350,118	
Inflation to Costs	1,058	3,706	5,149	7,672	8,153	9,742	66,410	100,830	
TOTAL	207,556	130,581	115,440	151,159	135,975	113,885	557,074	1,204,115	
REVENUES									
Mello Roos Bond (CFD) Proceeds		23,328	26,426	21,857	48,528	126,688	199,672	446,498	
Tax Increment Financing		-	-	6,863	4,319	27,445	181,293	219,720	
Private Capital	9,351	115,253	76,710	150,317	108,306	79,862	564,333	1,084,881	
TOTAL	138,681	138,681	103,136	178,636	161,153	234,094	945,299	1,761,099	
Total San Francisco Jobs/Year		1,159	882	1,495	1,347	1,957	7,903	14,723	
Annual Surplus (Deficit)		8,000	(12,304)	27,677	25,178	120,210	388,224	556,884	
Cumulative Surplus (Deficit)		8,000	(4,305)	23,372	48,550	168,760	556,984		

Hunters Point Redevelopment

Program / Project	Prior Years					FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN								DEFERRED
Demolition, Abatement and Earthwork								
Shoreline Improvements	4,645	6,696	4,324	14,214	4,107	66,109	100,095	-
Community/Arts Facilities	-	719	2,260	1,746	4,243	32,351	41,318	-
Artist Replacement Space	26,000	-	-	-	-	-	26,000	-
Building 101 Upgrades	-	-	-	-	-	-	10,000	-
Phase 1 Community Facilities Parcel	-	-	-	-	-	-	-	57,863
HPS Fire Station	-	-	-	-	-	-	-	14,000
CP School Site	-	-	-	-	-	-	10,601	-
Arts Center	-	-	-	-	-	-	-	20,000
Phase 2 Community Facilities Space	-	-	-	-	-	-	-	26,000
Transportation Improvements								
On-Site	26,049	16,239	19,082	24,757	40,849	69,390	196,365	-
Yosemite Slough Bridge	-	-	-	-	-	58,000	58,000	-
Harvey	-	-	12,841	-	-	-	12,841	-
Ferry Terminal	-	-	-	-	-	-	-	20,000
Off-site: Innes	8,711	8,711	-	-	-	-	17,422	-
Off-site: Falco	-	-	-	-	-	19,147	19,147	-
Off-site: Gilman	-	-	-	7,368	-	-	7,368	-
Off-site: Other (Jamestown, Ingerson)	-	-	-	-	-	30,000	30,000	-
Building 813	-	-	-	-	-	-	-	115,000
Parks and Open Space								
HPS Phase 1 Parks	1,200	-	-	-	-	-	1,200	-
HPS Phase 2 Parks	-	-	-	-	-	56,302	56,302	-
CP Parks	-	-	-	-	10,000	-	10,000	-
Alice Griffin Parks	-	-	-	-	6,757	1,248	8,005	-
TOTAL	66,605	32,365	38,506	48,085	65,956	332,547	584,063	272,463
REVENUES								
Mello-Roos Bonds (CFD) Bond Proceeds	8,031	4,656	11,813	70,649	3,643	93,938	192,731	
Tax Increment Bond Proceeds	-	-	3,685	17,680	13,049	168,184	202,599	
State and Federal Funds	9,811	3,548	1,344	3,762	4,264	9,452	32,182	
TOTAL	17,842	8,204	16,843	92,092	20,957	271,574	427,513	
Total San Francisco Jobs/Year	149	69	141	770	175	2,270	3,574	
Annual Surplus (Deficit)	(48,763)	(24,160)	(21,663)	44,007	(44,999)	(60,973)	(156,551)	
Cumulative Surplus (Deficit)	(48,763)	(72,923)	(94,586)	(50,579)	(96,578)	(156,551)		

Planning - Rincon Hill

Program / Project	Prior Years	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN									DEFERRED
Transportation and Streetscape	3,251	1,500	9,706	5,373	5,741	6,037	4,368	32,725	
Recreation and Open Space	4,828	100	-	-	-	-	-	100	
Library Materials	300	-	-	-	-	-	-	-	
SoMa Stabilization Fund	3,215	3,238	-	-	-	-	-	3,238	
Program Administration	827	174	-	47	-	-	-	221	
TOTAL	12,421	5,012	9,706	5,420	5,741	6,037	4,368	36,284	
REVENUES									
Local - Rincon Hill Impact Fee	22,189	4,350	-	1,183	-	-	-	5,533	
Local - Other Sources	-	-	1,000	4,500	5,500	6,000	4,400	21,400	
TOTAL	22,189	4,350	1,000	5,683	5,500	6,000	4,400	26,933	
Annual Surplus (Deficit)	9,778	(662)	(8,706)	263	(241)	(37)	32	427	
Cumulative Surplus (Deficit)	9,778	9,116	410	673	432	365	427		

Planning - Market & Octavia

Program / Project	Prior Years	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN									DEFERRED
Transportation and Streetscape	5,242	5,370	2,425	1,300	5,400	800	7,744	23,039	
Recreation and Open Space	480	3,014	180	2,000	500	-	2,430	8,124	
Child Care	-	1,273	-	-	-	1,075	911	3,259	
Library Materials	127	-	-	-	-	-	-	-	
Van Ness and Market Infrastructure Fee	-	-	900	500	-	-	-	1,400	
Program Administration	377	189	316	131	117	117	583	1,453	
Non-Impact Fee Expenditures	6,900	109	88	92	94	-	1,666	2,049	
TOTAL	13,126	9,955	3,909	4,023	6,111	1,692	13,334	39,324	
REVENUES									
Local - Market & Octavia Impact Fee	11,968	3,777	6,328	2,620	2,333	2,333	11,668	29,059	
Local - Van Ness and Market Infrastructure Fee	-	44	1,407	-	-	-	-	1,451	
Local - Other Sources	6,900	109	88	92	94	-	1,666	2,049	
TOTAL	18,868	3,930	7,823	2,712	2,427	2,333	13,334	32,559	
Annual Surplus (Deficit)	5,742	(6,025)	3,914	(1,311)	(3,684)	341	-	(1,023)	
Cumulative Surplus (Deficit)	5,742	(283)	3,631	2,320	(1,364)	(1,023)			

Program / Project	Prior Years	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN									DEFERRED
Housing	3,507	1,770	335	5,842	836	836	4,180	13,799	
Transportation and Streetscape	4,224	14,569	7,305	19,639	1,275	1,380	4,680	48,848	
Recreation and Open Space	6,783	3,882	6,455	10,271	4,081	2,619	13,925	41,433	
Child Care	1,916	84	660	1,512	423	423	2,065	5,167	
Library Materials	713	-	-	-	-	-	-	-	
Program Administration	1,021	728	298	1,152	221	221	1,035	3,655	
TOTAL	18,164	21,033	15,063	38,416	6,836	5,679	25,885	112,903	
REVENUES									
Housing Revenue	3,507	1,770	335	5,842	836	836	4,180	13,799	
Transportation Revenue	12,249	8,082	4,433	20,654	1,284	1,284	4,225	39,962	
Open Space Revenue	7,427	6,520	4,698	10,008	2,819	2,819	13,925	40,789	
Child Care Revenue	1,075	925	660	1,512	423	423	2,065	6,008	
Library Revenue	245	175	102	405	96	96	455	1,329	
Program Administration Revenue	1,021	728	298	1,152	221	221	1,035	3,655	
TOTAL	25,524	18,200	10,526	39,573	5,679	5,679	25,885	105,542	
Annual Surplus (Deficit)	7,361	(2,833)	(4,527)	1,157	(1,157)	-	-	-	
Cumulative Surplus (Deficit)	7,361	4,527	-	1,157	-	-	-	-	

Planning - Balboa Park									
Program / Project	Prior Years	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
SPENDING PLAN									DEFERRED
Transportation and Streetscape	-	-	-	-	-	-	325	199	524
Recreation and Open Space	-	-	-	-	-	-	175	108	283
Community Facilities	-	-	-	-	-	-	115	68	183
TOTAL	-	-	-	-	-	-	615	375	990
REVENUES									
Transportation Revenue	75	5	26	33	106	64	184	418	
Open Space Revenue	43	3	16	19	62	37	108	245	
Community Facilities Revenue	28	2	10	12	39	24	68	155	
Program Administration Revenue	6	-	2	3	9	5	15	34	
TOTAL	152	10	54	67	216	130	375	852	
Annual Surplus (Deficit)	152	10	54	67	216	(485)	-	14	
Cumulative Surplus (Deficit)	152	162	216	283	499	14	14		

Planning - Visitation Valley

Program / Project	Prior Years					FY 2021 - 2025			Backlog
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	2025	Plan Total	DEFERRED
SPENDING PLAN									
Transportation and Streetscape	506	928	1,287	1,574	1,077	376	2,250	7,483	
Recreation and Open Space	-	912	944	1,154	790	322	1,543	5,684	
Child Care	-	-	1,347	769	527	184	1,100	3,927	
Library Materials	1,328	-	-	-	-	-	-	-	
Program Administration	80	98	119	146	100	35	208	706	
TOTAL	1,913	1,938	3,697	3,643	2,494	917	5,102	17,790	
REVENUES									
Transportation Revenue	536	1,058	1,287	1,574	1,077	376	2,250	7,623	
Recreation Revenue	459	776	944	1,154	790	276	1,650	5,590	
Child Care Revenue	421	517	629	769	527	184	1,100	3,727	
Community Facilities Revenue	172	126	-	-	-	46	343	515	
Library Revenue	325	-	-	-	-	-	-	-	
Program Administration Revenue	80	98	119	146	100	35	208	706	
TOTAL	1,994	2,576	2,979	3,643	2,494	917	5,552	16,150	
Annual Surplus (Deficit)	80	638	(718)	-	-	-	450	450	
Cumulative Surplus (Deficit)	80	718	-	-	-	-	450	450	

Planning - Transit Center District

Program / Project	Prior Years					FY 2021 - 2025			Backlog
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	2025	Plan Total	DEFERRED
SPENDING PLAN									
Transportation and Streetscape	9,640	5,000	23,760	45,500	2,500	-	-	76,760	
Recreation and Open Space	2,300	2,650	8,950	16,848	-	-	12,744	41,192	
TOTAL	11,940	7,650	32,710	62,348	2,500	-	12,744	117,952	
REVENUES									
Transportation Revenue	10,100	7,528	22,413	48,128	-	-	32,350	110,419	
Open Space Revenue	3,690	2,610	8,506	16,848	-	-	12,744	40,708	
TOTAL	13,790	10,138	30,919	64,976	-	-	45,094	151,127	
Annual Surplus (Deficit)	1,850	2,488	(1,791)	2,628	(2,500)	-	32,350	35,025	
Cumulative Surplus (Deficit)	1,850	4,338	2,547	5,175	2,675	2,675	35,025	35,025	

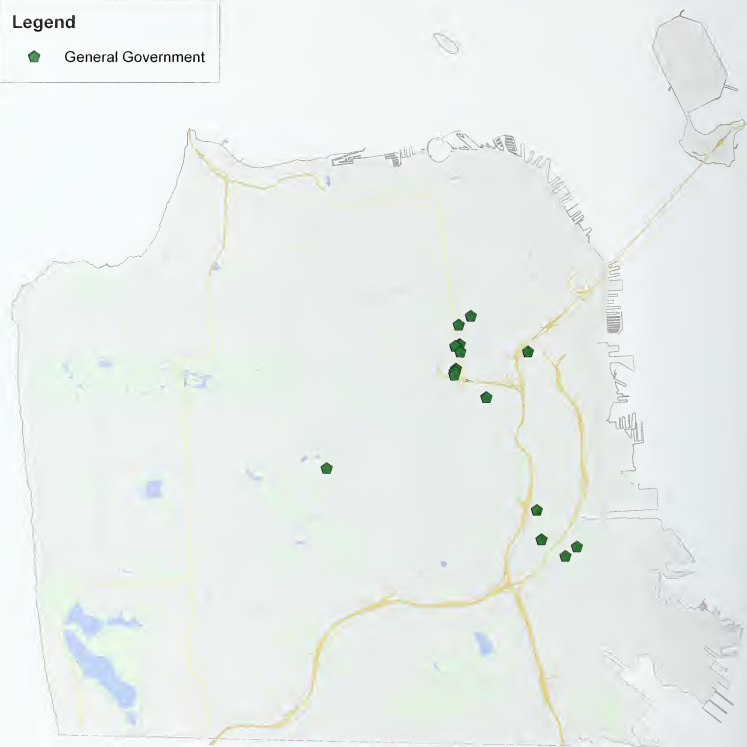


IX | General Government

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Legend

◆ General Government



The City's Real Estate Division manages more than four million square feet of office space and other civic facilities, primarily in the Civic Center, along with other facilities such as the current Hall of Justice at 850 Bryant Street, Public Defender's Office at 555 7th Street, and Animal Care & Control at 1200 15th Street, in support of the operations of multiple departments. The key facilities are displayed on the opposing page.

Highlights and Accomplishments

San Francisco has been making continuous facility improvements, which are yielding a better performing portfolio of buildings, as evidenced in the annual Energy Benchmarking Report. Over \$700,000 in capital improvements (mostly energy-efficiency related) to City Hall have raised the Energy Star rating to 91 (performing in the 91st percentile nationally among similar offices), with an expected LEED-EB rating of Platinum in 2015, the building's Centennial year. Efficiency improvements to 25 Van Ness have raised the Energy Star rating there to 77, qualifying it for LEED certification. 25 Van Ness is a National Landmark asset, and capital improvements during FY 2015 include façade protection and renewal of the antiquated elevators.



25 Van Ness Office Space

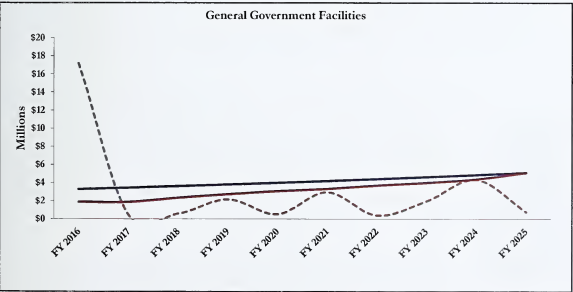
Much attention has been paid recently to the City's leased portfolio, with the goal of leveraging tenancies into capital investments made by private owners to benefit the City, thus reducing the burden to the General Fund. An example of this is 1235 Mission Street, a partnership with SFUSD to invest over \$6 million in the asset as part of a new 12-year lease approved by both governing Boards in 2014. Another example is the improvement to 1145 Market Street, to facilitate the co-location of Retirement and the Health Services System in a long-term lease, in order to provide a one-stop employee resource center at a key transit-friendly Market Street address.

The City will be advancing a public-private partnership office development at 1500 Mission Street to deliver a new 464,000 sqft Class A office building to the portfolio, slated to open in early 2019. This development facilitates the relocation of the Departments of Public Works, Planning, and Building Inspection, among others, to a single location, providing enhanced customer service at a true one-stop permitting center. This development will also enable the City to dispose of under-utilized assets in the Civic Center, in some cases fostering more appropriately dense mixed-use transit-oriented development.

The benefits of acquiring office space rather than leasing is that it offers protection from rental rate fluctuations, allows for more long-term planning, and provides greater flexibility with respect to modifying office space.

1. Renewal Program

Renewal needs for General Government facilities total \$199 million. Given funding constraints, the Plan allocates \$32 million to meet these needs.

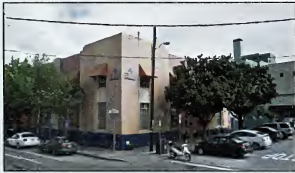


2. Enhancement Program (FY 2016 – FY 2025)

Wholesale Produce Market Expansion. In 2012, the Board of Supervisors approved the new 60-year master lease of the Wholesale Produce Market, including an expansion of the market to include Jerrold Avenue and 901 Rankin Street. CEQA approval was secured in 2012, and phase one of the project – to repurpose 901 Rankin for market expansion and new produce-related tenancy – broke ground in mid-2013, with tenancies starting in early 2015. The entire project increases the footprint of the market by about 25 percent, makes improvements to comply with real estate market demands and anticipated food safety regulations, and involves an investment of over \$70 million over two decades. Funding sources are current market revenue, and a combination of financing options including New Market Tax Credits, all outside of the City's General Fund. The initial investment of \$5.5 million for design and construction of 901 Rankin was funded by the San Francisco Produce Market Corporation net revenues reserved to date. More information can be found at: www.sfproduce.org.

The Market expansion required the demolition of the Department of Technology (DT) Industrial Yard and the SFMTA street operations center at 901 Rankin. The DT facility was temporarily relocated to 1800 Jerrold, but since 1800 Jerrold lies in the path of another critical city infrastructure project, a second relocation of the DT facility is required. Planning is underway to relocate the DT facility to 501 Cesar Chavez by spring 2016.

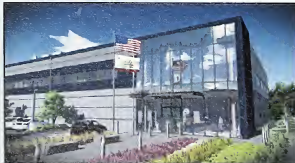
Animal Care and Control. The Department of Animal Care and Control has a proposed project to rebuild the animal shelter at its existing site, 1200 15th Street. Schematic designs and costs models have been completed, recommending facility improvements to increase seismic safety, enhance workflow and customer experience, strengthen disease control, and integrate new design standards for animal housing that boost animal adoptability. The estimated cost for the renovated facility is \$49 million as part of the Public Health and Safety G.O. Bond proposed for June 2016.



Animal care and control

800MHz Radio Site Improvements. The City's 800MHz Citywide Emergency Radio System Replacement project, estimated to cost approximately \$70 million, requires capital improvements at various sites. These capital improvements include a new radio tower at Twin Peaks, South Hill, and VA Hospital, and generator work at Twin Peaks, Bernal Heights, Clay Jones, and Forest Hill. They also include HVAC improvements and a new Building Management System at all radio sites, as well as the establishment of a new radio site in the Bayview/Hunters Point area. The estimated cost for these improvements is \$5 million, and will be funded by the General Fund.

Office of the Chief Medical Examiner. The Office of the Chief Medical Examiner received \$65 million from ESER 2014 G.O. Bonds to relocate from the HOJ to a seismically safe facility at 1 Newhall Avenue. Storage for deceased after a large disaster as well as an improved autopsy suite and toxicology laboratory will be provided. The project is fully funded, construction documents are being finalized, and construction is scheduled to begin by July 2015. More information on the ESER 2014 Bond can be found in the Public Safety Chapter.



Office of the chief medical examiner rendering

GSA Central Shops and DPW Corporate Yard Modernization. An analysis of restructuring of the Yard is now underway, with a goal to design, fund and implement a new multi-departmental industrial facility for the City at a Cesar Chavez location by 2024. The Plan funds this project at \$100 million in FY 2025, using Certificates of Participation, although it is anticipated that additional

funding might be required. Central Shops will be relocated from 1800 Jerrold by spring 2016, delivered through a public-private partnership, funded by the SFPUC, as this effort is part of phase I of the Southeast Water Pollution Control Facility improvements.

ADA Improvements. In addition to completing General Service Agency projects as laid out in San Francisco's ADA Transition Plan, the Mayor's Office on Disability plans to study emerging needs to remove critical access barriers at City facilities in FY 2016. Projects identified by the study will be completed on an on-going basis.

3. Emerging Needs

The following emerging needs will be reviewed in subsequent capital plans as additional planning occurs and uncertainty around project-specific issues is resolved.

Assessor-Recorder Space Modernization. This project would modernize the Assessor-Recorder space at its City Hall location, in order to provide for improved public service operations and security, create a functional employee break room, provide confidential office space for Human Resources and senior managers, add additional cubicles for new employees, and reconfigure existing cubicles to maximize office space and improve operational efficiency.

Fiber Optic and Wi-Fi Expansion. The City is currently exploring the possibility of expanding its fiber network to improve connectivity among City facilities, increasing access to Wi-Fi in public spaces, and increasing connectivity for San Francisco residents.

Fiber Upgrades for Radio Sites. This project would provide enhanced fiber communications to the 800MHz Radio Sites, in order to improve the redundancy capability of all sites.

Dig Once Implementation. City and private utility excavators are now required to place communications conduit in trenches, pursuant to the Dig Once Ordinance, leading to increased costs.

1011 Turk – IT Area Renovation. This project would renovate the IT Area at 1011 Turk St., which houses several critical operational areas, including the 911 Help Desk. The current space is inadequate for the monitoring systems needed and present staffing levels.



Public Works Dept. Corporate Yard



Fiber and wi-fi improvements

General Government

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	23,971	25,169	26,428	15,080	15,834	91,870	198,352	51,316
SPENDING PLAN								
State of good repair renewal - Proposed Uses	1,885	1,879	2,342	2,733	3,080	20,535	32,453	
ADA Improvements	450	1,100	1,100	1,000	1,000	5,000	9,650	-
Enhancements	21,581	2,500	5,528	-	-	144,081	173,680	-
TOTAL	23,916	5,479	8,970	3,733	4,080	169,616	215,793	-
REVENUES								
General Fund	4,835	5,479	3,442	3,733	4,080	25,535	47,103	
Certificates of Participation	-	-	-	-	-	100,000	100,000	
SF Wholesale Produce Market Funds	19,081	-	5,528	-	-	44,081	68,690	
TOTAL	23,916	5,479	8,970	3,733	4,080	169,616	215,793	
Total San Francisco Jobs/Year	200	46	75	31	34	1,418	1,804	

Departmental Breakdown Department of Emergency Management

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	409	430	451	474	497	2,886	5,147	(3,012)

SPENDING PLAN

State of good repair renewal - Proposed Uses	445	443	553	645	727	4,846	7,658	
800MHz Radio Site Improvements	2,500	2,500	-	-	-	-	5,000	-
TOTAL	2,945	2,943	553	645	727	4,846	12,658	-

DEFERRED

REVENUES

General Fund	445	443	553	645	727	4,846	7,658	
General Fund - Enhancement	2,500	2,500	-	-	-	-	5,000	
TOTAL	2,945	2,943	553	645	727	4,846	12,658	
Total San Francisco Jobs/Year	25	25	5	5	6	41	106	

Department of Public Works

Program / Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021 - 2025	Plan Total	Backlog
State of good repair renewal - Need	964	1,012	1,033	1,108	1,163	6,750	12,061	1,202

SPENDING PLAN

State of good repair renewal - Proposed Uses	689	687	856	999	1,126	7,507	11,865	
Public Works Operation Yard Modernization	-	-	-	-	-	100,000	100,000	-
TOTAL	689	687	856	999	1,126	107,507	111,865	-

DEFERRED

REVENUES

General Fund	689	687	856	999	1,126	7,507	11,865	
Certificates of Participation	-	-	-	-	-	100,000	100,000	
TOTAL	689	687	856	999	1,126	107,507	111,865	
Total San Francisco Jobs/Year	6	6	7	8	9	899	935	

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A. Administrative Code Sections 3.20 and 3.21

SEC. 3.20. CAPITAL EXPENDITURE PLAN.

By March 1 of each odd-numbered year, beginning with March 1, 2013, the City Administrator shall submit to the Mayor and Board of Supervisors a ten-year capital expenditure plan which shall include an assessment of the City's capital infrastructure needs, investments required to meet the needs identified through this assessment, and a plan of finance to fund these investments. By May 1 of the same year, the Mayor and Board of Supervisors shall review, update, amend, and adopt by resolution the ten-year capital expenditure plan. The Mayor and Board of Supervisors may update the plan as necessary and appropriate to reflect the City's priorities, resources, and requirements.

The capital expenditure plan shall include all recommended capital project investments for each year of the plan. The plan shall incorporate all major planned investments to maintain, repair, and improve the condition of the City's capital assets, including but not limited to city streets, sidewalks, parks, and rights-of-way; public transit infrastructure; airport and port; water, sewer, and power utilities; and all City-owned facilities.

The capital expenditure plan shall include a plan of finance for all recommended investments, including proposed uses of General and Enterprise Funds to be spent to meet these requirements. Additionally, the plan shall recommend the use and timing of long-term debt to fund planned capital expenditures, including General Obligation bond measures.

The capital expenditure plan shall include a summary of operating costs and impacts on City operations that are projected to result from capital investments recommended in the plan. This operations review shall include expected changes in the cost and quality of City service delivery.

The plan shall also include a summary and description of projects deferred from the ten-year capital expenditure plan given non-availability of funding necessary to meet assessed capital needs. (Added by Ord. 216-05, File No. 050920, App. 8/19/2005; amended by Ord. 40-06, File No. 060078, App. 3/10/2006; Ord. 222-11, File No. 111001, App. 11/15/2011, Eff. 12/15/2011 (Former Sec. 3.20 added by Ord. 223-97, App. 6/6/97; amended by Ord. 55-98, App. 2/20/98; repealed by Ord. 216-05)

SEC. 3.21. CAPITAL PLANNING COMMITTEE.

There is hereby created a Capital Planning Committee consisting of the City Administrator as chair, the President of the Board of Supervisors, the Mayor's Finance Director, the Controller, the City Planning Director, the Director of Public Works, the Airport Director, the Executive Director of the Municipal Transportation Agency, the General Manager of the Public Utilities System, the General Manager of the Recreation and Parks Department, and the Executive Director of the Port of San Francisco. Each member of the Capital Planning Committee may designate a person to represent her or him as a voting member of the Committee. Such designations shall be in written documents signed by the designating member and filed with the City Administrator, or her or his designee.

The mission of the Capital Planning Committee is to review the proposed capital expenditure plan and to monitor the City's ongoing compliance with the final adopted capital plan. As such, the Capital Planning Committee shall (1) establish prioritization and assessment criteria to assist the City Administrator with the development of the capital expenditure plan, (2) annually review the City Administrator's proposed capital expenditure plan prior to its submission to the Mayor and Board of Supervisors, and (3) review the annual budget and any proposed use of long-term debt, including General Obligation bonds, to ensure compliance with the adopted capital expenditure plan.

The Board of Supervisors shall not place on the ballot, or authorize the issuance of any long term financing, until the Capital Planning Committee completes a review of the proposal and submits its recommendation to the Board of Supervisors. Each proposal shall be in form and substance satisfactory to the Committee, and shall be accompanied by descriptive financial, architectural, and/or engineering data, and all other pertinent material in sufficiently complete detail to permit the Committee to review all aspects of the proposal. The Committee shall submit a written report to the Mayor and the Board analyzing the feasibility, cost, and priority of each proposal relative to the City's capital expenditure plan.

The Chair of the Capital Planning Committee is hereby authorized to adopt such rules, definitions, and procedures as are necessary to meet the requirements described in Section 3.20 and 3.21. (Added by Ord. 216-05, File No. 050920, App. 8/19/2005) (Former Sec. 3.21 added by Ord. 223-97, App. 6/6/97; repealed by Ord. 216-05)

B. Job Creation Estimation Methodology

In an effort to better evaluate and prioritize capital projects, local governments are examining not only upfront financial costs but also their contributions of direct and indirect jobs generated by the capital investment. The City and County of San Francisco's FY 2016-2025 Capital Plan estimates almost \$32 billion in capital projects during the next 10 years, which will create as many as 240,000 San Francisco jobs. A job is defined as one job year of full-time work. For example, five people employed for four years equals 20 job years. This jobs estimate is based on the REMI Policy Insight model which attributes 8.36 San Francisco jobs per million dollars in construction spending. This is exclusive of the additional jobs created outside of the City and County as workers and materials migrate in from surrounding areas.

Customized for San Francisco, REMI has the unique ability to determine the effects of taxes and other variables on the local economy. As a result, the Controller's Office of Economic Analysis uses this model for analyzing the economic impact of pending legislation. The table below summarizes the number of job years from the REMI model based on \$1 million of construction spending in San Francisco.

Estimated Jobs Created from Construction Spending in San Francisco

Economic Sector	Total San Francisco Jobs per \$1M Construction Spending
Forestry, Fishing, and Related Activities	0.00
Mining	0.01
Utilities	0.01
Construction	5.36
Manufacturing	0.08
Wholesale Trade	0.10
Retail Trade	0.36
Transportation and Warehousing	0.05
Information	0.05
Finance and Insurance	0.14
Real Estate and Rental and Leasing	0.11
Professional, Scientific, and Technical Services	0.40
Management of Companies and Enterprises	0.02
Administrative and Waste Management Services	0.21
Educational Services	0.04
Health Care and Social Assistance	0.27
Arts, Entertainment, and Recreation	0.07
Accommodation and Food Services	0.23
Other Services, except Public Administration	0.27
Government	0.59
Total Jobs	8.36

Source: Economic Multipliers from Office of Economic Analysis, Controller's Office, REMI Model Outputs

C. Funding Principles

	Criteria Description	Criteria Measurement
Priority 1	<p>Improvement is necessary to comply with a federal, state, or local legal mandate.</p> <p>The City faces a wide range of directives to improve its facilities, some with significant consequences for failure to perform.</p>	<ul style="list-style-type: none"> • Action is mandated or required by local, state, or federal law, legal judgment or court order. • Action reduces the City's exposure to legal liability. • There are significant legal, financial, operating, or accreditation consequences for failure to perform.
Priority 2	<p>Provides for the imminent life, health, safety and security of occupants and the public or prevents the loss of use of the asset.</p> <p>Capital projects that minimize physical danger to those who use and work in City facilities, including protection during seismic events and exposure to hazardous materials.</p>	<ul style="list-style-type: none"> • The facility has a poor seismic rating with a high risk of collapse or structural damage. • Increases resiliency to withstand and recover from a disaster, particularly in critical facilities (i.e., hospitals, police and fire stations, jails, sewer system, pump stations, etc). • Mitigates hazardous materials and/or protects the vital environmental health of those who visit, use, and work in City facilities.
Priority 3	<p>Ensures timely maintenance and renewal of existing infrastructure.</p> <p>It is imperative to maintain the City's infrastructure. However, the lack of maintenance at some facilities will have a greater effect on the asset's value and/or future repair and replacement costs.</p>	<ul style="list-style-type: none"> • Failure to implement project risks potential loss or reduces the useful life of a City asset's value. • The facility provides government services that cannot be provided at another location.
Priority 4	<p>Supports formal programs or objectives of an adopted plan or action by the Board or Mayor.</p> <p>Capital investments should be integrated with adopted departmental and citywide long-term goals and objectives.</p>	<ul style="list-style-type: none"> • Supports a formally adopted plan or action by the Board of Supervisors or Mayor, (i.e., the City's General Plan or Neighborhood Area Plan) • Makes a substantial contribution to a broadly-accepted citywide goal (i.e., ecological sustainability or historic preservation)
Priority 5	<p>Enhances the City's economic vitality by stimulating the local economy, increasing revenue, improving government effectiveness, or reducing operating costs.</p> <p>Some projects have a direct or indirect effect on the City's revenues or expenditures. Cost savings or revenue enhancements may help offset the cost to the City of some capital investments.</p>	<ul style="list-style-type: none"> • Generates direct (increased service charges, leases, fees, grants, gifts, or other sources) or indirect (economic development, an increased tax base, business attraction or retention, or other sources) revenues. • Reduces maintenance or operating costs (i.e., through capital renewal, building redesign, or reduced staffing needs). • Improves government effectiveness and efficiency in the delivery of services (i.e., faster response times, improved customer service, or increased departmental coordination).

D. Methodology, Assumptions & Terms

A. Methodology

Under direction of the City Administrator, department staff annually assesses facility conditions, determines cost projections for renewal projects and proposed enhancements, and analyzes available funding resources to prepare a ten-year capital plan.

Through a series of meetings the CPC reviews proposals, staff recommendations, and documents toward the development of the citywide capital plan. These reviews do not, and are not meant to, replace the authority of department commissions' or other oversight bodies under the City Charter and other codes. Rather, the ten-year plan is meant to provide a forum that examines capital needs from a citywide perspective and to foster a dialogue on those needs between stakeholders, commissions, the Mayor, and the Board of Supervisors.

Staff uses two approaches to collect data for the Plan. The Facilities Renewal Resource Model (FRRM) is used to collect information on the state of repair for major facility and infrastructure subsystems (also known as renewals) for all of the General Fund departments. The Airport, Port, and MTA have implemented this model for their facilities as well. In addition, General Fund departments submitted enhancement requests using the Capital Planning and Reporting database (CPRD). Each proposal is reviewed by professional staff (e.g., architects, engineers, etc.) and categorized as a funded, deferred, or emerging need.

- **Facilities Renewal Resource Model (FRRM)**

For the eighth year, the City used the facility life-cycle model to predict annual funding requirements for General Fund department facilities. The objectives of the facility modeling effort are listed below.

- Develop a budget model to predict annual funding requirements for facilities renewal and document the existing backlog of deferred maintenance in a consistent way for all departments.
- Provide a basis for a funding plan that will first address adequate resources for renewal and then a reduction of the deferred maintenance backlog.
- Create consistent and comparative data among departments for determining funding allocations and targets for addressing renewal as a part of operating or capital budgets.
- Deliver a cost model to each department with associated staff training so that facilities renewal and deferred maintenance needs can be updated annually and progress in meeting those needs can be measured.
- Provide a planning tool for departmental use which provides a useful life "systems" profile of each building, as a way of predicting future funding needs or packaging projects to leverage fund sources.
- Develop a credible model to assess needs consistently and to focus on total funding needs and strategies.

The model uses building information (gross square feet, construction date, facility subsystem type), and an approach based on subsystem life cycles and replacement costs to estimate the backlog of deferred maintenance and future capital reinvestment needs. Below is an example of the ten-year renewal forecast report generated by FRRM for a particular facility. This report – one of dozens available – shows subsystems within the building that need to be replaced during the next 10 years and the corresponding cost (in thousands). A variety of other reports are available for further analysis.

Building Name: SFGH - MAIN HOSPITAL (BLDG 5)		CRV(000's): \$511,376		Building No.: 912		GSF: 617,400		Year Built: 1974		FCI: 0.00			
Backlog and 10 year Renewal Forecast by Building (000's)													
Subsystem Name		Backlog	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
a.3. Roofing - Membr./Built-up, Shingle, Bitumen		\$0	\$776	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$776
b.1. Building Extensiors (Hard)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$295	\$0	\$0	\$0	\$295
c.1. Elevators and Conveying Systems		\$0	\$3,253	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,253
e.1 HVAC - Distribution Systems		\$0	\$14,077	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,077
d.1. HVAC - Equipment		\$0	\$8,332	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,332
d.2. HVAC - Controls		\$0	\$7,121	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,121
f.1. Electrical Equipment		\$0	\$0	\$22,486	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22,486
g.1. Plumbing Fixtures		\$0	\$2,733	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,733
i.1. Fire Protection Systems		\$0	\$2,603	\$473	\$1,183	\$473	\$0	\$0	\$0	\$0	\$0	\$0	\$4,732
i.2. Fire Detection Systems		\$0	\$0	\$2,957	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,957
k.1. Built-In Equipment and Specialties		\$0	\$7,180	\$0	\$0	\$0	\$0	\$0	\$7,180	\$0	\$0	\$0	\$7,180
i.2. Interior Finishes		\$0	\$2,366	\$0	\$0	\$0	\$0	\$9,464	\$0	\$0	\$0	\$0	\$11,830
k.2. Hospital Equipment		\$0	\$13,708	\$4,569	\$0	\$4,569	\$0	\$0	\$0	\$0	\$0	\$0	\$22,847
TOTAL BY BUILDING		\$0	\$62,129	\$30,486	\$1,183	\$5,043	\$0	\$9,464	\$295	\$0	\$0	\$0	\$108,599

Each department maintains the model, with the capability of summarizing information at both the department and citywide level. The model has a great deal of built-in flexibility that allows the city to enter new data and even change the underlying assumptions in future years.

The FY 2014-2023 Capital Plan reflects renewal data collected from August through December 2012 and includes detailed information for each General Fund department. These findings are summarized in the renewal graphs and the renewal line of the financial summary schedules for each of the General Fund service areas found in Chapter I.

B. Assumptions

- In FY 2014 and FY 2015, the Plan uses the Annual Infrastructure Construction Cost Inflation Estimate (AICCE) of four percent as the escalation rate. For every year thereafter, the Plan assumes an annual escalation rate of five percent for all projects, unless otherwise noted.
- Fiscal years (FY) in the Plan refer to the calendar year in which the City's July 1 to June 30 budget cycle ends. For example, FY 2014 equals the calendar year dates from July 1, 2013 to June 30, 2014.
- Dollars are listed in thousands for all financial schedules unless otherwise noted.
- For all proposed General Obligation bonds, the financial schedules show the total bond amount in the fiscal year during which the bond is to be approved by voters. For example, a G.O. bond proposal on the November 2014 ballot will appear in FY 2015 of the financial schedule.
- The General Obligation bond program assumes growth in Net Assessed Value of 4.2 percent in FY 2014, 2.3 percent in FY 2015, 2.3 percent in FY 2016, and 4.5 percent annually thereafter.
- When issued, G.O. bonds proposed by this Plan will not increase voters' long-term property tax rates above FY 2006 levels. In other words, new G.O. bonds will only be used as a funding source when existing approved and issued debt is retired and/or the property tax base grows.
- The General Fund Debt program assumes that General Fund discretionary revenues grow 4.5 percent in FY 2014, 2.1 percent in FY 2015, 3.0 percent in FY 2016, and 4.5 percent annually thereafter and that the amount of General Fund revenues spent on debt service will not exceed 3.25 percent.
- The Pay-as-you-go program assumes only General Fund revenue sources.

C. General Terms

Commonly used terms throughout the Plan are defined below.

- **Assessed Value.** The dollar value assigned to individual real estate or other property for the purpose of levying taxes. Net Assessed Value is the total assessed value across the City less any exempt property.
- **Capital Project.** A major construction and improvement project, including the planning and design phases. Examples include the resurfacing of a street and the construction of a new hospital, bridge, or community center.
- **Certificates of Participation (COPs).** A commonly used form of lease financing for capital improvement projects or purchases of essential equipment in which the debt service on the financing is secured by an underlying lease structure.
- **Community Facility District (CFD) - also known as a Mello-Roos District.** A district where a special property tax on real estate, in addition to the normal property tax, is imposed on property owners within the district to fund public improvements benefiting the district. The tax is often used to secure debt.
- **Debt Service.** The annual payment of principal and interest on the City's bonded debt.
- **Deferred Project.** Project not funded in the Plan either due to lack of funding or the timeline of the project falling outside of the ten-year planning cycle.
- **Emerging Need.** Project not funded in the Capital Plan because additional planning is needed or significant uncertainty around project-specific issues still exists.
- **Enhancement.** Investment that increases an asset's value or useful life and/or changes its use. These typically result from the passage of new laws or mandates, functional changes, or technological advancements. Examples include purchasing or constructing a new facility or park; major renovations of or additions to an existing facility; accessibility improvements to comply with the Americans with Disabilities Act (ADA); and planting new street trees.

While enhancements can be small-scale projects such as the removal of barriers to comply with ADA requirements, these typically are large-scale, multi-year, projects such as renovations, additions, or new facilities. While some project costs can be funded with pay-as-you-go sources, most enhancements require debt financing through the issuance of General Obligation (G.O.) bonds, Certificates of Participation (COPs) or lease revenue bonds.

- **Enterprise Department.** Department that does not require a General Fund subsidy because it generates its own revenues from fees and charges for services. The City has four Enterprise departments: Public Utilities Commission, San Francisco International Airport, Port of San Francisco, and the Municipal Transportation Agency.
- **External Agency.** Agency that is a separate, autonomous entity and operates outside the jurisdiction of the City and County of San Francisco.
- **General Fund Department.** Department that relies primarily or entirely on the General Fund as a revenue source to provide City services. The General Fund departments included in the Plan are the California Academy of Sciences, Asian Art Museum, Arts Commission, Department of Emergency Management, Department of Public Health, Department of Public Works, Department of Technology, District Attorney's Office, Fine Arts Museum, Fire Department, General Services Agency, Human Services Agency, Juvenile Probation, Police Department, Public Library, Recreation and Parks Department, Sheriff's Department, Superior Court of California, and the War Memorial and Performing Arts Center.
- **General Fund.** The largest of the City's funds, the General Fund is a source for discretionary spending and funds many of the basic municipal services such as public safety, health and human services, and public works. Primary revenue sources for the General Fund include local taxes such as property, sales, business, and other taxes.
- **General Obligation Bonds (G.O. Bonds).** A municipal bond secured by property tax revenues. G.O. Bonds are appropriately used for the construction and/or acquisition of improvements to real property broadly available to the residents and visitors of San Francisco.
- **Horizontal Infrastructure.** Infrastructure required to deliver basic public goods and services such as roads, sewers, water lines, bridges, transit rail, and open space, among others.
- **Job Years.** Defined as one year of full-time work. For example, three people employed full-time for five years represent 15 job years.
- **Pay-as-you-go.** Refers to the funding of capital projects with current revenue on an annual basis rather than long-term debt. Pay-as-you-go projects are typically funded by General Fund revenues.
- **Renewal.** Investment that preserves or extends the useful life of facilities or infrastructure. Examples of renewal projects include the repair and replacement of major building systems including the roof, exterior walls and windows, and heating and cooling systems; street resurfacing; and the repair and replacement of infrastructure in the public right-of-way, including sidewalks and street structures.

Since renewal projects tend to be smaller investments compared with investments needed to replace entire facilities, the proposed plan funds the majority of these needs through pay-as-you-go cash revenue sources, typically appropriated through the City's annual budget process.

- **Revenue Bond.** A municipal bond secured by and repaid from specific revenues. Pledged revenues are often earnings from a self-supporting enterprise or utility. Typically, these revenues are associated with the asset for which the bond was originally issued.
- **Routine Maintenance.** Projects that provide for the day-to-day maintenance of existing buildings and infrastructure, including labor costs. Unlike renewals and enhancements, these are annual projects.
- **Vertical Infrastructure.** Facility structures such as hospitals, clinics, public safety buildings, administrative facilities, public housing units, community centers, and jails, among others.

E. Infrastructure Finance Districts: Threshold & Strategic Criteria

The following threshold and strategic criteria to guide the use of future Infrastructure Finance Districts (IFDs) in San Francisco were adopted by the Board of Supervisors (BOS) on February 18, 2011. These criteria are in addition to those in IFD law (CA Government Code section 53395 et. seq.)

The Guidelines are organized into two sets of criteria: (1) minimum “Threshold Criteria” that must be satisfied for an IFD to be formed by the BOS and (2) “Strategic Criteria” that may be considered when deciding whether to form a future IFD. These policy guidelines would not apply to any existing Redevelopment Area (IFD law prohibits it) or to any property owned or managed by the Port of San Francisco.

Threshold Criteria:

1. Limit to areas that are rezoned as part of an Area Plan or Development Agreement approved by the Board of Supervisors (BOS) and also adopted as a Planned Priority Development Area (PDA) by the Association of Bay Area Governments (ABAG). Priority Development Areas (PDAs) are locally-identified, infill development opportunity areas within existing communities. They are generally areas of at least 100 acres where there is local commitment to developing more housing along with amenities and services to meet the day-to-day needs of residents in a pedestrian-friendly environment served by transit. To be eligible to become a PDA, an area has to be within an existing community, near existing or planned fixed transit or served by comparable bus service, and planned for more housing. Designation of PDAs expresses the region's growth priorities and informs regional agencies, like the Metropolitan Transportation Commission (MTC), which jurisdictions want and need assistance. Planned PDAs are eligible for capital infrastructure funds, planning grants, and technical assistance. Linking creation of future IFDs to areas designated as PDAs will allow the City to leverage the increment generated by an IFD to increase its chances to receive matching regional, state or federal infrastructure and transportation grants.

2. Limit to areas where a rezoning results in a net fiscal benefit to the General Fund as determined by the Controller's Office. Specifically, the City must demonstrate that any added General Fund costs generated by the new service population projected to result from the growth supported by a rezoning are offset by greater General Fund revenues, resulting in a net fiscal benefit or surplus. As a general rule, this would mean that use of IFDs would be limited to areas that received substantial & quantifiable upzoning, based on actual net increases in height, bulk, density that result in greater developable FAR than the previous “baseline” zoning, or through liberalization of land use and permitting provisions that increase the certainty of entitlements and the value of property.

3. In general, restrict the maximum increment available to an annual average of 33-50% over the 30-year term of the IFD, and in no event allow the annual average increment over the life of the IFD to exceed the projected net fiscal benefit over the life of the IFD. This maximum average cap would include annual pay-as-you-go monies and bond service payments or some combination of both. The maximum average increment cap may be increased to 50% to fund neighborhood infrastructure that also provides clear citywide benefits, like an extension or upgrade of a MUNI light rail line or the development of a City-serving park. In any event, this policy would guarantee that an IFD diversion should always be less than the net fiscal benefit, guaranteeing that there is at least some gain to the General Fund in all circumstances. This policy would not prevent the “front-loading” of increment in the beginning years of an IFD to allow for bonding and the acceleration of construction of neighborhood-serving infrastructure, especially since accelerating delivery of infrastructure should have a correspondingly positive effect on property tax revenues for the General Fund.

4. Limit to areas with documented existing infrastructure deficiencies. Because the City has not developed universally-applied and objective citywide standards for assessing the sufficiency (or deficiency) of existing neighborhood-serving infrastructure, BOS-adopted planning documents (like Area Plans) that qualitatively and/or quantitatively describe such deficiencies will suffice until new citywide standards are adopted at a later date. After the adoption of a new IFD policy, the Capital Planning Committee should be tasked with developing a systematic and quantitative set of criteria or standards for assessing existing neighborhood infrastructure deficiencies in the following areas: (i) neighborhood parks & open space improvements; (ii) “Better Streets” streetscape & pedestrian safety improvements; (iii) bicycle network improvements; (iv) transit-supportive improvements; (v) publicly-owned community center and/or child-care facilities. Furthermore, the CPC would need to adopt citywide standards to avoid the use of IFD funds for “gold-plated park benches” or facilities that far exceed citywide norms for cost and quality.

5. Limit use of IFD monies to individual infrastructure projects where a source of long term maintenance funding is identified. Within an IFD, limit expenditure of IFD monies to projects that have identified a separate source of funding for ongoing maintenance and operations. In some cases this could be through public-private agreements, such as a Master HOA agreeing to maintain a public park or a Community Benefit District agreeing to fund long-term maintenance, or via the creation of a new supplemental property tax assessment district, like a Mello-Roos Community Facilities District.

Strategic Criteria:

- » In general, limit IFDs to parcels without any occupied residential use. The City may want to exclude parcels that contain existing occupied residential structures. This is because IFD law requires an actual voter-based election if there are 12 or more registered voters within the proposed boundaries of an IFD. If there are less than 12 registered voters, the law only requires a weighted vote of the property owners, which, in general, should reduce the complexity and time required for forming a district. On the other hand, there may be circumstances where a voter-based election may be both desirable and manageable.
- » Use IFDs as a strategy to leverage additional non-City resources. As noted in Threshold Criteria #1 above, IFDs should be used as a tool to leverage additional regional, state and federal funds, thereby serving a purpose beyond earmarking General Fund resources for needed infrastructure. In particular, IFDs may prove instrumental in securing matching federal or state dollars for transportation projects.
- » Consider adopting a limited policy of “overriding considerations” for situations where the BOS may have adopted zoning that purposely restricts or limits the economic “highest and best” use of a given area, thereby limiting or reducing the net General Fund benefit derived from a rezoning, but where other social policy objectives might dictate that some IFD revenues be spent on supportive infrastructure.

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This 2016-2025 Capital Plan represents the City's commitment to building a stronger future.

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Since 2008, San Francisco has invested over ten billion dollars in capital projects and infrastructure. This unprecedented level of investment has created over eighty thousand jobs and has been an integral part of San Francisco's economic rebound. These investment dollars have funded projects such as building retrofits, water system repairs, pier improvements, and many others, making San Francisco's infrastructure more vibrant and resilient.

Front Cover: San Francisco General Hospital's new Level One Trauma Center

